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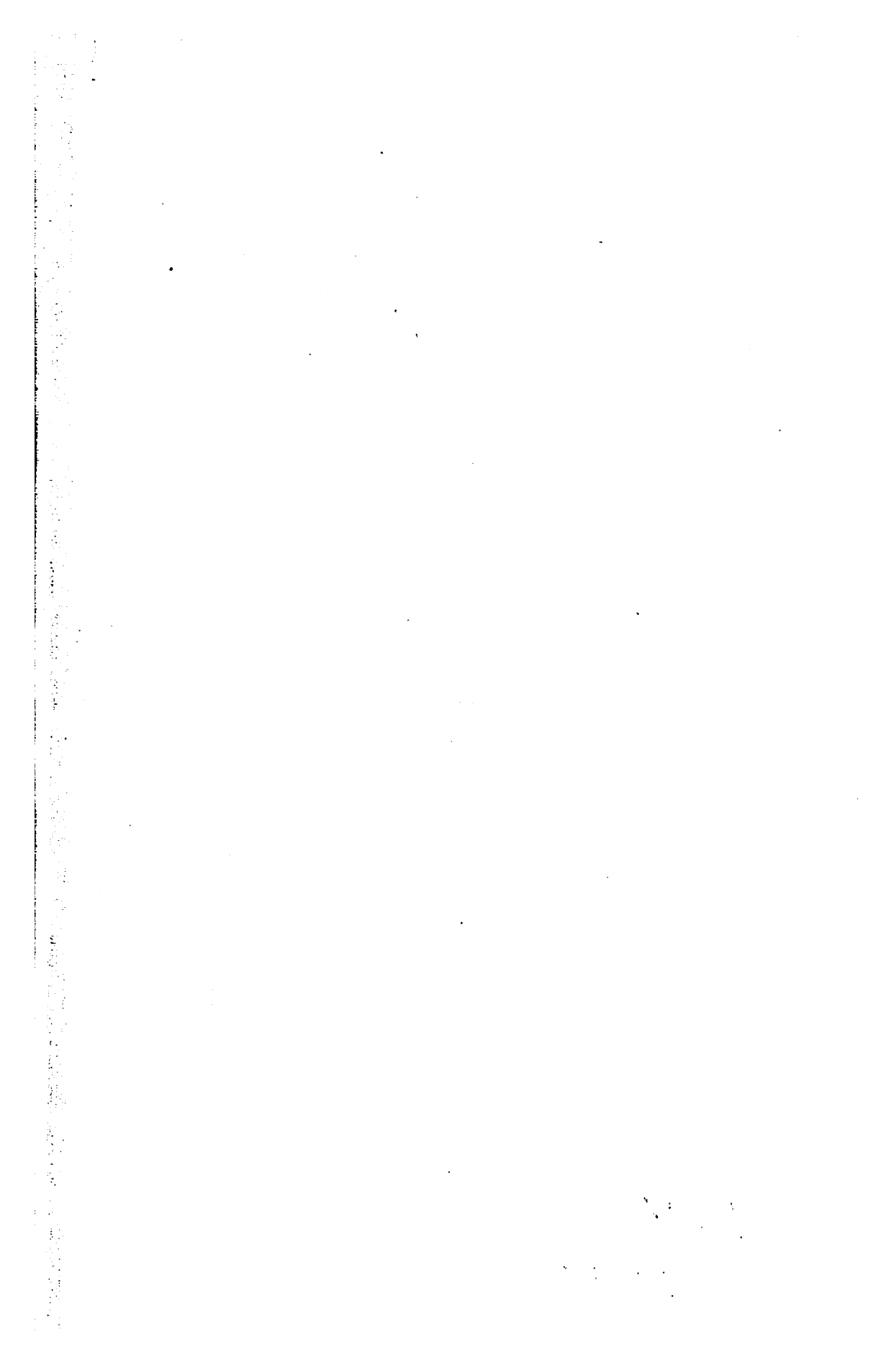
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FLOATING FLIES

AND HOW TO DRESS THEM.



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FLOATING FLIES

AND HOW TO DRESS THEM

A TREATISE

ON THE MOST MODERN METHODS OF DRESSING

ARTIFICIAL FLIES FOR

TROUT AND GRAYLING

WITH FULL ILLUSTRATED DIRECTIONS AND CONTAINING

NINETY HAND-COLOURED ENGRAVINGS OF THE

MOST KILLING PATTERNS

TOGETHER WITH A FEW

HINTS TO DRY-FLY FISHERMEN

BY

FREDERIC M. HALFORD

"Detached Badger" of "The Field"
Member of the "Houghton Club" "Fly Fishers' Club" &c.

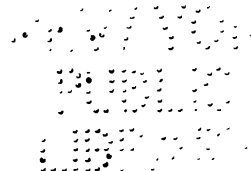


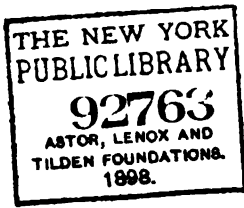
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SCRIBNER AND WELFORD

743 AND 745, BROADWAY

1886





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PREFACE.

A FEW years ago I consulted a professional fly-dresser as to the best means of learning to make artificial flies, to enable me to produce imitations of the natural insects sufficiently good to serve as patterns, and was seriously, and, I believe, without "*arrière pensée*," assured by him that it was impossible for an Amateur to acquire the art otherwise than by taking a series of lessons at a considerable cost. Having always been an unbeliever in the word *impossible*, I determined to try and teach myself. Accordingly, with a copy of Ronalds' "Fly Fisher's Entomology" opened before me, and a few indispensable materials, I commenced trying to puzzle out the mysteries of the craft. After many attempts, and almost as many failures, I succeeded in turning out something remotely akin in form and colour to the Red Spinner illustrated in that admirable treatise, and was further encouraged by finding a grayling sufficiently silly to take this bad imitation. I then set to work in right earnest, and dressed fly after fly, mostly de-

PREFACE.

formed in shape and inartistic in colouring, but, gradually, from mere dint of practice, producing artificials more nearly approaching my ideal, until ultimately I found myself able to tie a more or less creditable fly which the fish would occasionally deign to mistake for the natural insect.

About this period I took counsel of a friend, whose acquaintance I had made some short time previously, and who, in addition to being one of the best, if not *the* best dry-fly fisherman in England, was an adept in all the minutiae of dyeing, selecting, and preparing the materials, as well as the construction of artificial flies. To this friend, George Selwyn Marryat, I desire to express the deepest gratitude for the unwearying patience and perfect unselfishness with which he gradually inducted me into every detail known to him, and gave me the benefit of his invaluable experience, concealing nothing which would tend to perfect me in the art of imitating the various winged inhabitants of the stream. I soon found that I had acquired the means of giving myself a most pleasurable occupation during the long winter months, when fly-fishing was an impossible pursuit either from the exigencies of an active City life, or from the river being closed during the spawning-time of the trout.

The object of this work is to try and impart to others the knowledge I thus gained, and to save them many of the wearisome failures experienced

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through my ignorance of anything beyond the mere rudiments of the subject to be learned from a book. If I fail in this object, pray, kindly reader, impute the failure to my lack of words to express distinctly each operation; and if perchance I am successful in stimulating your desire to dress your own flies, and in showing you, as I fervently hope to do, how to accomplish this end, I shall be amply rewarded by your appreciation of these pages.

Before launching my little bark upon the open waters, I must perform the pleasant duty of acknowledging assistance received in the details of production. Publishers are usually very loth to incur the responsibilities of bringing out works of this character, which entail much expense, and require great delicacy of management in several important particulars. Few persons can imagine the difficulties to be overcome, and I feel that not only my individual thanks, but possibly the thanks of the entire angling fraternity, are heartily due to the publishers, and in an especial degree to Mr. R. B. Marston, Editor of the "Fishing Gazette," who took a deep personal interest in the progress of the venture. This firm not only undertook the heavy pecuniary liability and rendered me every assistance in their power, but gave me practically *carte blanche* in arranging matters of detail with printers, engravers on stone and wood, and

PREFACE.

colourists, each of whom has in his own particular calling successfully striven to convey accurately to the reader the Author's ideas.

FREDERIC M. HALFORD.

LONDON,
35, INVERNESS TERRACE,
October, 1885.

P.S.—It may be noticed that in the diagrams of fly-dressing, the tying silk is lapped in the opposite (or what some might call *left-handed*) direction to that adopted by the majority of professionals and amateurs. Attention is directed to this with the view of pointing out that it is not a blunder on the part of either the draughtsman or engraver. With the extreme end held in the left hand on top of the hook-shank I commence winding the silk with the right hand towards me. By proceeding in this way there is a natural inclination to pause and draw the silk down tightly when the hand is below the hook, and this is less likely to obscure the view of the work than with the more usual plan of winding the silk away from the operator.



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CHAPTER I.

ON EYED-HOOKS.

BEFORE many years are past the old-fashioned fly, dressed on a hook attached to a length of gut, will be practically obsolete, the advantages of the eyed-hook being so manifest that even the most conservative adherents of the old school, must, in time, be imbued with this most salutary reform. As a mere question of the comparative convenience of stowing away the flies, the absence of that cumbersome coil of gut, and the consequently smaller space in which those on eyed-hooks can be packed, would of itself be sufficient inducement to many anglers to adopt this improvement ; but when, in addition to this, they take into consideration the disappointment of finding last year's stock utterly unreliable, either from the gut having become partially decomposed by exposure to the air, or through the flies "drawing," owing to the wax on the tying-silk having

dried up, they will doubtlessly arrive at the conclusion that the invention of Mr. Hall,—or, rather, adaptation by that gentleman to small flies, of the old plan of forming the loop of a salmon or large trout fly, by turning up the wire of the hook itself,—is one which should commend itself to all votaries of the gentle craft. A great disadvantage of the old style of fly on gut, was that, in taking one out of a coil of half-a-dozen on a windy day, some two or three of those remaining were frequently blown away, and valuable time lost in vainly searching for them in the long grass.

Flies dressed on eyed-hooks float better and with less drying than those constructed on the old system. I am quite prepared to find some controversy raised on the point, and hence would urge those who dissent from this well-considered opinion to remember that in the case of the hook lashed to the gut by the waxed silk, there is in the body the additional weight of the gut itself, and, certainly, far more silk and wax, owing to the foundation of the body being increased in thickness by the substance of the gut. This increase is even more than appears at the first glance, seeing that the augmentation in the diameter of the body produces more than *thrice* that augmentation in the circumference or quantity of silk and wax used in binding it.

Another, and, in my opinion, paramount benefit is, that at the very earliest symptom of weakness

at the point of juncture of the head of the fly and gut (the point at which the maximum wear and tear takes place) it is only necessary in the case of the eyed-fly to break it off and tie on afresh, sacrificing at most a couple of inches of the fine end of the cast; while in the case of the hook on gut, the fly has become absolutely useless and beyond repair. It must also be remembered that with eyed-hooks the angler can use gut as coarse or fine as he may fancy for the particular day, while with flies on gut he would require to have each pattern dressed on two or three different thicknesses.

Some discussion has been raised lately in the press, on the comparative advantages of turned-up and turned-down eyes, and much stress laid by some of our highest angling authorities on the direction of the pull on the hook. In down-stream fishing, with sunk fly, this point may certainly be of importance, but to the dry-fly fisherman, for whose perusal this work is intended, seeing that the smallest drag is at once fatal, it cannot be material. For attaching the flies, I am distinctly of opinion that Mr. Hall's form of the eye, inclined upwards, is more convenient and therefore preferable.

As to the special knot to be used for fastening the hook to the cast, Mr. Hall's original one is beyond doubt the most secure, and for the full information of any not already cognizant of his method, the full directions are appended in his own words,

as given in "The Fishing Gazette" of April 12th, 1884, viz. :—

"Directions.

"Take the hook between finger and thumb of the left hand, and push the gut through the eye (as shown by the arrow); take a turn round the shank and back again through the eye (fig. 1). The



Fig. 1.

end A, which should not be less than $1\frac{1}{4}$ inch long, is then tied in a single knot *round* the long end of the gut. If the gut is well wetted and a gentle pull given, the single knot will slide down to the eye and form a perfectly secure and rigid fastening, and the gut will stand out in the direction of the shank of the hook. The superfluous end of A may be cut off quite close to the eye."

Some anglers may point out the difficulty, especially to those whose sight is not very good, of passing the end of the gut cast *twice* through the eye of the hook, and, in the case of the very smallest flies dressed on oo and ooo hooks, I must confess that this is a feat occasionally almost impossible to accomplish. Others may complain of the unpleasant manner in which many professional fly-dressers fill the eye up with varnish. The

latter fault is due either to the ignorance or to the carelessness of the workman, and the remedy is a very simple one, viz., to return or refuse to purchase any flies so finished.

The following method of attaching eyed-hooks, the invention of Major Turle, will obviate the former objection raised. The advantages of this method over all others are that the end of the gut is passed only once through the eye; the knot is a perfectly simple one, and yet quite secure; and while tying it, the fly, being pushed well up the cast, is entirely out of the way of the operator's fingers, and cannot be dropped.

Pass the end of the gut cast A, previously well soaked, upwards through the eye, and draw the fly well up the cast, so as to be out of the way. Carry the end of the gut round itself to form an open loop as shown (fig. 2).

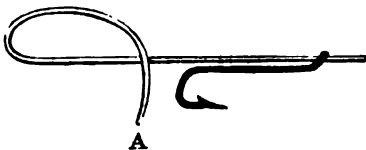


Fig. 2.

With the end A make an open turn round the gut and end of the loop (fig. 3).

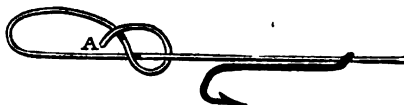


Fig. 3.

Pass the end A through the open turn just made (fig. 4).

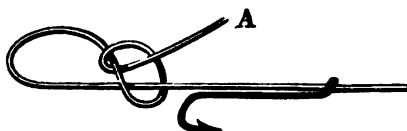


Fig. 4.

Draw the knot thus made nearly tight; if drawn

quite tight it is apt to fray the gut in the subsequent operations. Pass the fly through the loop, and place the knot on top of the neck of the eye (fig. 5).

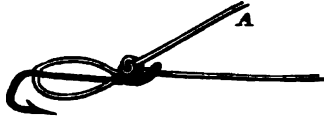


Fig. 5.

Bend the loop downwards, at the same time carefully drawing the fibres of the hackle clear of it; and, holding the fly between the thumb and forefinger of the left hand, draw the loop up close with the upper part of the cast. Pull the knot quite tight with the end A (fig. 6).

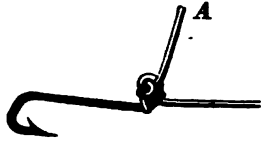


Fig. 6.

Cut off the projecting end A, and the fly is securely fastened.

Every dry-fly fisherman who has tried eyed-hooks, will admit that they last much longer and are far less liable to be cracked off than those on gut, this being due to the strain at the head of the fly being, in all cases, borne by a double thickness of gut; and in making very long casts this is a most decided economy in expenditure, both of cash, and what is, perhaps, even more important when the fish are rising, of time.





CHAPTER II.

ON MATERIALS AND IMPLEMENTS FOR FLY DRESSING.

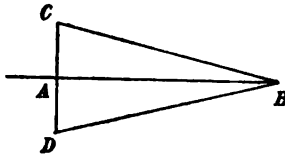
I HAVE, as far as possible, in the selection of materials, indicated such as can be readily obtained, although in some instances it has been found necessary to illustrate patterns requiring feathers which are very scarce ; but in every case where a fair imitation can be produced from the plumage of a bird indigenous to this country, or inexpensive to purchase, I have given the preference to this, or at least described the rendering with the native bird as a substitute for the rarer, though possibly more appropriate material which it may be almost impossible to find or procure by any means open to the ordinary amateur.

Of all feathers required for fly dressing, the *hackle* is the one to be placed first on the list, as being the most important, and, unfortunately, at the same time, the most difficult to procure. For floating flies cock hackles are so immeasurably superior,

both as to their natural gloss and transparency, as well as the greater ease with which they are freed from moisture in fishing, that, excepting in the case of honey duns and other very rare colours, I have practically discarded all hen hackles from my collection. It must be noted that hackles should be taken from a cock of eighteen months to two years old, and the best time of the year to take them is about Christmas. An exception to this rule should be made in the case of dun hackles, which are blue or grizzled at Christmas, but before the autumn moult have golden or sunburnt points, though a trifle more ragged in the fibre. Common barndoor fowls seldom produce such hackles as would please the critical eye of the connoisseur, and when it is remembered how few in number on any bird are sufficiently small to dress duns, some idea may be formed of the almost insuperable difficulty of accumulating a really serviceable stock : in fact, it is almost impossible to get cock hackles really fit for fly-making purposes, except by purchasing them at considerable cost from professional breeders, or from the fishing-tackle makers. I can only make one suggestion on the subject to amateur fly-dressers, resident in the metropolis, who do not care to pay the fancy prices asked in the shops, and that is to try and induce some of their country cousins to keep and breed fowls of the kind required, especially for the production of dun hackles. I have succeeded in

persuading a relative to perpetuate a good strain of Blue Andalusians, and to save for my own use the hackles of every bird, cock or hen (which in so rare a colour as this must not be despised), killed for the table, or which has succumbed to accident, or to the pugnacious propensities of the remaining denizens of the poultry yard.

Another great difficulty in respect to hackles, is the great proportion that are more or less deformed in shape. The typically perfect hackle should follow the form indicated by the annexed geometrical sketch, in which the line *A B* represents



the full length of the central quill of the hackle after stripping from it the downy part at the root; on the line *A B* set up a perpendicular *D A C*, and let *A C* in length be one-fourth of *A B*; join *C B* and *D B*. The fibres forming the triangle *A C B*, when at right angles to *A B*, would be those of a perfectly proportioned hackle, and, although such mathematically correct things do not exist in nature, the nearer they approach this ideal the better will be the form of the artificial fly produced. In the majority of hackles it will, however, be found that as they approach the point, the fibres become too long in proportion, and in many are actually longer than *A C* and *A D*, which should, of course, be the longest fibres in the hackle.

Red, ginger, and furnace hackles can be best ob-

tained from game cocks, and well-shaped ones, in which the colour on both sides is nearly the same, are simply invaluable. Badger hackles of the approved tint, viz., dark brown, nearly black centres, and cream-coloured (not white) points, are found on Dorkings. For dyeing, pure white hackles from white bantams and the lightest of the Andalusians are usually selected, but, if not savouring too much of extravagance, the best duns, especially those which are shaded or flecked with yellowish or ginger points, are certainly the most successful for dyeing in the various shades and tints of olives. Natural black hackles are usually rusty, and require dyeing to make them jet black—a process not attainable by amateurs. For small flies, the best black hackles to use are those from the neck of an old cock starling. All hackles before using require to have the downy portion at the root-end stripped off. Various recipes are given in angling books for preserving hackles and other feathers from the ravages of moths, such as pepper, tobacco leaf, camphor, cedar chips, colocynth or bitter apple, &c.; but the only really efficacious and certain preventive, is to immerse them for a few minutes in a solution of Corrosive Sublimate in Alcohol.

When any close-plumed feathers such as the neck feathers of pheasant, partridge, grouse, grey hen, &c., are used as hackles, after stripping off the downy part at the root-end of the quill, take

the extreme point between the thumb and forefinger of the left hand, and with the right thumb and forefinger, slightly moistened, stroke back the whole of the plume except the small portion held between the left thumb and forefinger, as shown by the sketch (fig. 7).



Fig. 7.

For the legs and bodies of some flies the hair or fur of certain animals (dubbing) is used in place of ordinary hackles; and in such cases the plan adopted is to spin or twist it on the tying-silk for the body of the fly, taking care to put an extra thickness on to the shoulder-end of the body, tapering it to the tail, and after the fly is completed to pick out with the dubbing-needle a few fibres to form the legs. There are, however, patterns in which the body is of plain silk or quill, and the legs only of dubbing, and in these instances a somewhat more complicated procedure is necessary, viz.:—Thoroughly wax a short length of tying-silk and double it over the dubbing-needle, the point of which is firmly stuck into the edge of the operating-table. Separate

the fibres of the hair or fur to be used, and lay them as much as possible horizontally across one end of the tying-silk A, fig. 8; place the other end of the silk over and press it closely down on the fur, fig. 9; then, taking the two ends of the silk between the thumb and forefinger of the right hand, twist up tightly. The effect of this will be to

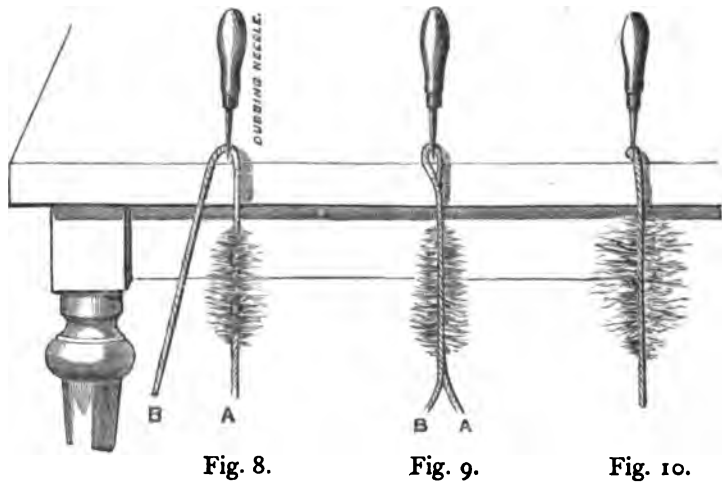


Fig. 8.

Fig. 9.

Fig. 10.

twist up the silk and fur between the two ends of it, as shown in fig. 10, into a rough-looking hackle, which is used exactly like an ordinary one, the silk representing the central quill, and the fur the fibres of the hackle. By the same method, having a hackle of the right colour, but too long in the fibre for the size of the hook, the dresser can, by detaching the separate strands, laying them horizontally across a length of thoroughly waxed doubled tying-silk, and, twisting them up as above, produce an

imitation hackle with fibres only half the length of the natural one from which they were taken.

The following list will comprise nearly all the other feathers required :—

Wings of starling, both young and old, of coot, snipe, landrail, water rail, thrush, young grouse, partridge, pheasant (cock and hen), woodcock, and jay ; also the brown pink feathers from under the wings of a peacock, and tail feathers from the tom-tit, partridge, pheasant, and golden pheasant.

For dubbing bodies, &c.,—fur from the hare's ear, hare's face, hare's fleck or hair outside the shoulder, the palest buff-coloured fur from the flanks and belly of the opossum, mole, water-rat, and common mouse, with odds and ends of cuttings from any light blue, yellow, or brown refuse furs in a furrier's shop. These, with various coloured crewels torn to shreds, will, when properly blended, produce almost any tint required ; the blending merely consisting in tearing the separate threads into shreds with the fingers, mixing them and tearing them up together, until the various shades and colours are thoroughly incorporated. A little practice will enable an amateur naturally gifted with an eye for colour to match almost any shade or tint with dubbing.

Floss silks of different colours were formerly much appreciated for bodies, but the more modern plan of using various quills, either in their natural state or dyed, is a very great improvement. The

colour of silk bodies when wetted is so much darkened and even altered in character, that it is almost impossible to tell, excepting by experiment with each colour and shade, what it really will appear when presented to the fish ; but in the case of quills, the colour is absolutely identical whether wet or dry, the only effect of the water being to render the quill body a little more transparent in appearance. Another great disadvantage to the dry-fly fisherman when using flies with silk or dubbing bodies, is the extreme difficulty of drying them when once saturated with moisture. Possibly at some future date a means of thoroughly waterproofing dubbing may be invented, and if so, I venture to predict that the dubbing body will entirely supersede the quill, as being so much more transparent and watery in appearance, although I do not attach much importance to the dictum of Ronalds, that bodies of other than soft materials are unsuccessful, owing to the fish rapidly ejecting them from their mouths : to my notion, by the time the fish has discovered that the body of the fly in his mouth is an imitation, he is either securely hooked, or the reverse.

Quill being at the present time the most suitable material, its use is recommended wherever practicable. The quill generally used is a strand from a peacock-eye or end of the tail feather, and in dyeing the quills the whole eye is operated on at once. Before working it into the body each strand,

whether natural or dyed, is stripped of the metallic flue adhering to it by drawing the strand several times from point to root between the nail of the right thumb and the ball of the right forefinger. The beginner must not be discouraged at finding that he breaks an abnormally large proportion of the quills in stripping them. In all cases select the upper strands of the eye for dyeing pale colours, as they show a larger proportion of the light ground of the quill and a smaller proportion of dark stripe. For very pale tints the peacock-eye can be more or less bleached before dyeing by immersion for a longer or shorter time in "Di-oxide of Hydrogen" or "Ozone Bleach," as it is usually called. In fact it can be rendered absolutely white. Care, however, must be taken not to leave the feather too long in the bleach, as it has a tendency to rot or weaken it. Any feather can be bleached in the same preparation, but in all cases the operator must avoid spilling any of the liquid on his hands, as it is said to be caustic in its effect.

Peacock herl or the longer fibres from the tail feathers are indispensable, especially those of a copper-bronze hue, which are used without stripping, either single strands for ribbing the bodies, or two or three twisted tightly together to form the bodies themselves. The colour of the copper herl is much improved by dyeing in Crawshaw's "Magenta." Some strands of peacock herl are of a pale cinnamon tint towards the root-end, and are

used in their natural state for ribbing the bodies of the Spent Gnat, and the cinnamon-coloured ends only, when stripped, are invaluable for the bodies of such flies as the Cinnamon Quill. The green-peacock herl is obtained from the sword feather, and the long strands of it should be invariably used when the body of a fly is ribbed with peacock, except in patterns where the copper-coloured ribbing is indispensable, the herl from the sword feather being much narrower and stronger than that from the ordinary tail feather. For green-peacock herl bodies two or three of the shorter strands of the sword feather twisted together should be used.

Strands of ostrich feathers, black and white, heron herl, and the fibres from the wing feather of an ordinary grey goose are also occasionally useful. Tail and pinion feathers from the condor and the adjutant are very difficult to obtain, but immeasurably superior to any other quills for bodies, whether dyed or in their natural state. They are far tougher and stronger than any peacock; there is a flue on each side of the quill, one much longer and fuller than the other; and the longer of these flues only can be stripped from the quills by tearing it down with the thumb-nail and forefinger of the right hand. The pale colour of the condor quill lends itself admirably for dyeing to the pale undecided tints so prevalent among the duns during the summer months. The slate blue of the adjutant, when dyed in the manner and preparation here-

after described, is undoubtedly the best quill for the body of an ordinary Red-spinner.

Quills for bodies can also be obtained from the wing and tail feathers of starling, coot, chaffinch, partridge, &c. The method to be adopted is to make a slight incision in the surface of the central quill, near the extreme point, with a sharp knife downwards and towards the root-end of the feather, slightly raising the outer surface of the quill with the knife. Holding the feather in the left hand, and catching the projecting end raised by the knife between the nail of the right thumb and the ball of the forefinger, the quill can be torn clear of the feather; it then requires to be passed backwards and forwards between the right thumb-nail and forefinger several times, to remove any of the pith remaining on the under-side of the quill: these quills take the dyes readily, but should be thoroughly soaked in warm water before using, to render them quite soft. India-rubber for detached or ordinary bodies can either be cut with a wet sharp knife from the ordinary bottle-rubber, or thin slips drawn from elastic webbing can be used. In all cases select the palest and most transparent pieces for this purpose.

Wheaten straw, or maize, such as is used for the covering of Mexican cigarettes, are the best materials for May-fly bodies. Ordinary shoemaker's bristles are required for the foundation of detached bodies, and horsehair, either white, dyed, or natural colours, for covering them.

Pike scales, prepared by a process patented by Mr. Macnee, of Bohally, Pitlochry, make very good transparent wings for black gnats. For May-fly wings use the saddle or breast feathers from the Canadian Wood or Summer duck, Egyptian goose, Rouen drake, either dyed or natural, and pintail or teal. Such feathers as the little scarlet ones on the neck of the ibis, the orange of the Indian crow, or the blue and yellow tail feathers of the macaw, are occasionally useful for grayling flies.

For whisks or tails, in addition to the ordinary cock beard hackles, tail feathers from the Bird of Paradise, brown mallard wing (called "spey" feathers), fibres from partridge or pheasant tail, and small rabbit's or rat's whiskers should be included in a fly-dresser's collection. Mr. Marryat is of opinion that whisks of cock gallina neck feathers, dyed or natural, are tougher and less liable to break in use than any ordinary cock hackles.

Gold or silver wire, twist or flat tinsel of various width and thickness, can be procured from the manufacturers of military lace, badges, &c.

For tying-silk, when making small flies, nothing I have yet seen can compare for quality with Messrs. Pearsall's reels of gossamer silk made for the purpose, and the same silk doubled and slightly twisted together before being waxed, for larger patterns. The pale-coloured ones only should be used, such as the white, cream, yellow, orange, and red, always selecting a paler shade, but similar in tone

to that of the body of the fly. As an example, for the palest olives use cream-coloured tying-silk, and for the darker olives the various shades of yellow.

The numerous recipes given in general angling books for preparing transparent wax, are, without exception, unsuccessful: the wax so prepared is either brittle and hence difficult to get to adhere to the silk, or it is too soft, and rapidly becomes greasy in use. Ordinary rod-maker's wax is the best, and in dressing flies with delicate-coloured bodies it should be rendered as nearly colourless as possible by continually pulling it out into thin strips and working them up together. A small bottle of varnish made by dissolving pure shellac in spirits of wine will practically complete the list of materials.

As to the implements required, although not an absolute necessity, a vice is a great help, especially in making the very small flies. No one, amateur or professional, after once experiencing the advantages of having the hook rigidly held by a process which leaves both hands free, would ever revert to the old and uncomfortable plan of holding the bend of the hook between the thumb and forefinger of the left hand throughout the operation of tying. A really good serviceable vice, however, is not easily procured, as those usually made and sold in the tackle shops for the purpose are faulty in design, and inferior in construction and material; the jaws, instead of being made of the finest and hardest cast steel, are of case-har-

dened iron or some such unreliable metal; the screw to compress them is of soft iron, placed

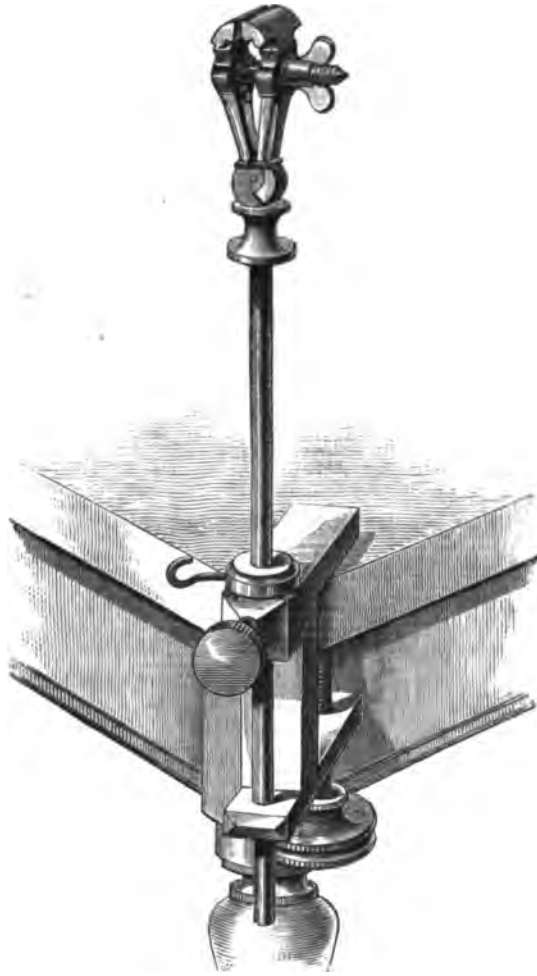


Fig. 11.

much too far from the holding faces of the jaws, and usually made with a clumsy head, and the

point projecting beyond the vice, so as to be in the way of the fly-dresser at every turn of the silk, Messrs. Holtzapffel and Co., 64, Charing Cross, now keep vices specially made for the amateur fly-dresser's use, in accordance with the author's views, as illustrated (fig. 11), and although the prime cost is necessarily somewhat higher, yet in this, as in most other mechanical apparatus, the comparatively costly, but properly-made and well-finished article will, in the end, prove cheaper than the rubbish ordinarily sold for such purpose. The loose hook immediately above the clamp is intended to be used when twisting and waxing the doubled silk for large flies.

A sharp penknife, a strong pair of scissors for rough use, a dubbing-needle, which is simply a fairly large blunt-pointed needle mounted in a handle, a pair of curved oculist's scissors, the hackle pliers, and a pair of long bull-dog pliers, as illustrated in the directions for making the upright reverse-winged duns,¹ will complete the amateur's equipment.

¹ See page 53.





CHAPTER III.

ON DYEING.

IT is proposed in this work to describe generally the process of dyeing each colour required for the list of flies illustrated. The great secret in getting the tints accurately consists in using very weak solutions of the various dyes, and giving plenty of time for each operation. In some cases it is necessary to leave the materials for many days in the preparations, and in others a few moments are sufficient; continual experiment, attention to detail, and plenty of patience, will enable the amateur to succeed eventually, and above all I would proffer the advice not to be discouraged by failure. I should probably be charged with exaggeration in attempting to give the reader any idea of the number of times I have failed, and still fail in hitting off the exact tone and shade required.

The apparatus necessary is of a very simple and inexpensive character: it comprises a few common glazed earthenware pipkins; a spirit lamp to heat

the ingredients and keep them simmering; or, better still, one of "Spielman's Automatic Gas Heaters,"—a small, inexpensive apparatus, possessing great heating power, so contrived that the weight of the utensil placed upon it automatically ignites the heater, while its removal cuts off the flame;—and a few chemist's glass stirring-rods for mixing the dyes or handling the feathers, &c. When dyeing a number of hackles, or other feathers, it is a great convenience to have a small, deep colander, which will fit into the pipkins; in this way the whole of the materials to be dyed are kept together, and put into and taken out of the dye simultaneously, so that while examining a single specimen for colour, the remainder are not being dyed a darker tinge. It is well to note that as soon as the colander is withdrawn from the dye in the pipkin, the whole of the contents should be thoroughly washed out by turning a stream of clean cold water through the colander; otherwise, when taking out a feather, and while drying and examining it for colour, the small quantity of dye left on the other feathers in the colander will frequently be found to have deepened their tint considerably. All dyeing should be done in distilled water, or if this is not procurable, in soft (rain) water, and notes should be carefully made of the proportionate quantity of the ingredients used, as well as the exact time required to produce each colour or shade.

All feathers, or other animal matter, before

being dyed, should be soaked for some hours in a solution of alum, about 1 oz. to a quart of boiling water, or in a weaker solution of potash or ordinary washing soda, the object of this being to remove sufficient of the natural grease from the fibres to enable the colour to strike. After dyeing, wash thoroughly in cold water, shake out as much of the wet as possible; and then put the feathers in an ordinary hat-box, and keep shaking the box about before a bright fire. This dries the feathers thoroughly, and the effect of shaking during desiccation is that every fibre arranges itself in its natural position. If hackles, or other feathers, whether dyed or natural, become crushed or disarranged, a thorough soaking in boiling water, followed by the above drying process, will restore them to their natural shape.

The following are a few useful recipes for dyes:—

Green Olive.

Boil a tea-cup of ebony chips in a quart of distilled or soft water, to which is added a piece of chrome potash, about the size of a small pea; boil down to a pint, fill up to a quart again, and again boil down to a pint. Pour the clear solution off this into another vessel, and add three drops of muriate of tin. Immerse the feathers in this until dyed to shade.

Medium Olive.

Boil, for two or three hours, two good handfuls

of the outside brown leaves or coating of an onion root, in a quart of vinegar and distilled water in equal parts. Pour off the clear liquid into another vessel, and immerse the materials to be dyed in it. If the colour be too pale and yellow, the addition of the smallest possible piece of copperas will produce a browner and darker shade.

Brown Olive.

The addition of a small quantity of black tea, and a small piece of copperas, to the preparation for medium olive, will produce the mixture necessary to dye this ; the more copperas is added, the browner and darker the colour becomes.

Green Drake.

For dyeing green drake wings, the two following recipes are admirable :—

A. (Mr. Marryat's.) Soak the feathers for at least twenty-four hours in solution of alum, then rinse out in cold water ; make a decoction of a handful of outside onion-leaves to a pint of boiling water. Dye the feathers in this until they are a distinctly orange olive tint, wash out thoroughly, and then dye in a solution of a quart of boiling water to a small quantity of Judson's "slate," a few drops of Stevens' Blue Black ink, and two or three grains of Crawshaw's "green." If the colour produced is in any way bright it is wrong, and the feathers must be taken out just as the latter dye is driving off

the former. By the use of this recipe, the green drake wings are dyed of the subdued blue green tint of the natural fly.

B. (G. Holland, of Failsworth, near Manchester.)

1. In a quart of soft water, put half a teacup of ebony chips, a quarter of a teacup of logwood chips, and a piece of chrome potash the size of a small pea; boil to rather over a pint; put in the feathers and dye them to a dirty blue brown.

2. In a fresh vessel, put a piece of extract of fustic with a quart of soft water, simmer, and pour over the feathers already taken out of No. 1 dye; let them remain fifteen minutes, then add five drops of double muriate of tin, and simmer to shade, which should be that known as the "Champion" of the late John Hammond, a decidedly dark brown olive tint.

Slate.

A handful of logwood chips to a quart of boiling water, simmer two or three hours, add a piece of copperas the size of a small nut.

Iron Blue.

The following is Mr. G. Holland's method of dyeing starling feathers for the wings of the iron blue dun:—Select medium or dark feathers from the starling wing, and, after separating them from the wing, steep them in a tea-spoonful of solution of potash to a quart of boiling water. Dye for

first stage in Judson's "slate" dissolved in boiling water, until a rather deep shade is got. In a quart of boiling water, dissolve sufficient extract of indigo to colour it a pale sky blue, and, for the second stage, steep the feathers until they are of the required shade.

It occurred to me that there should be no great practical difficulty in making preparations which would dye any colour required by the fly-dresser in a single operation, and, with a view of elucidating this point, I put myself in communication with Messrs. E. Crawshaw and Co., makers of aniline and other dyes, of 80, Fann Street, Aldersgate Street, E.C. This firm, after some consideration, offered to make a set of dyes, specially designed to produce all the colours required for the pattern flies illustrated in this work. On receipt of the specimen packets, each was practically tested, and, after alterations, and even the making of new dyes in some cases, I am gratified to find that there is now to be obtained a reliable set of dyes, sold at a very moderate price, with which an amateur can dye quills, hackles, &c., to any of the shades given in the coloured illustrations.

The following are the simple directions for the use of these dyes :—

Thoroughly wash all feathers, &c., before dyeing, in a weak solution of ordinary washing soda in boiling water, so as to remove the grease; then rinse well in cold water. Dissolve the dye in

boiling water, using for a pint of water, about the quantity of dye that can be taken up on the point of the small blade of an ordinary penknife. Stir thoroughly until dissolved, then put in the material to be dyed, and keep stirring until the required shade is obtained. The following colours—green olive, medium olive, brown olive, green drake, grannom green, slate, iron blue, and red spinner—will require a little vinegar, or other acid to be added to the dye bath, in order to thoroughly bring out and fix the colour.

When fully dyed, wash the feathers well in cold water, and dip them for a few minutes in a weak solution of alum, say about $\frac{1}{4}$ oz. to a quart of boiling water, wash thoroughly in cold water, and dry as previously described. The alum in this case is used as a mordant, its effect being to discharge any superfluous colour, and fix the remaining dye so as to render it quite fast.

In case any shade should be required which is not exactly hit off by any one of these colours, two or more of the dyes can be mixed together in any proportion, or the addition of some of the other colours made by Messrs. Crawshaw, and sold in similar packets, may be necessary.

These special dyes are illustrated on the plate facing page 30, and in the particulars for dyeing any portion of the artificial flies given in a succeeding chapter, are referred to by the numbers appended in each case. The coloured block im-

mediately under the name of each dye, shows some of the various shades which can be produced on a white ground by the use of that particular dye. Of course, when dyeing on a feather which is naturally coloured, the exact shade will be somewhat altered and tinged with the natural colour of the feather.



Crawshaw's Special Dyes.

Nº I. Green Olive



Nº IV. Green Indigo



Nº



Nº II. Medium Olive



Nº III. Green



Nº

Nº III. Brown Olive



Nº VI. Slate



Nº



Crawshaw's Special Dyes.

Nº I. Green Olive.



Nº IV. Green Drake.



Nº II Medium Olive.



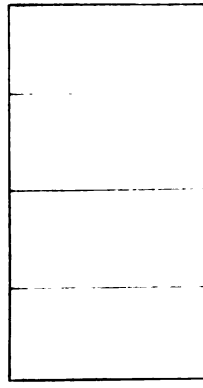
Nº V. Grassum Green.



Nº VII Iron Blue.



Nº VIII Canary.



Nº III Brown Olive.

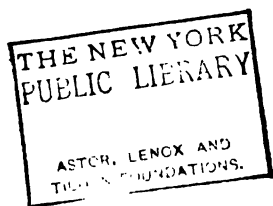


Nº VI Slate.



Nº IX Red Spinner.







CHAPTER IV.

TO DRESS FLOATING FLIES ON EYED-HOOKS.

TO a casual observer it does not seem a very difficult task to describe in detail the successive operations of dressing flies, but the fact remains that of the many writers on Angling who have touched on the subject of fly-tying, no one has, as yet, succeeded in giving a description sufficiently lucid to enable the tyro by his own unaided exertions to acquire this art. The methods herein described and figured are such only as have been thoroughly tried by the author, and in many instances exhaustively threshed out by comparing notes copiously with other amateurs. Wherever it has been found by experience that any part of the process has produced doubtful results, or flies which in the continual wear and tear of dry-fly fishing have not proved durable, such faulty *modus operandi* has been, as far as possible, amended, or, if necessary, rejected in favour of some improved manipulation. If the fly-tyer is so wedded to the old style of fly,

with gut attached, that my previous arguments have failed to persuade him to adopt the eyed-hook, it will be necessary for him to whip the gut to the under-side of the hook with the waxed silk before commencing operations. If flies for the sunk or wet fly style of fishing be required, the quantity of wings and hackle should be slightly decreased, but in other respects the procedure should be identical.

As the first example, take the case of an *ordinary upright winged dun* :—

The operating table should be placed in the full light of a window, and the vice securely clamped to the right-hand corner of it ; the height of the vice-head should be regulated to suit the dresser, with the fly-nut for tightening the jaws of the vice on the farther side from him.

Fix the bend of the hook firmly in the vice with the shank projecting to the right. The temper of the hook should then be tested by pulling the eye-end of the hook-shank sharply upwards with the thumb and forefinger of the right hand. If the hook is soft it will by this action be bent out of shape, and if on the other hand it is too highly tempered, it will snap off short at the bend. In *either* of these cases the hook should be discarded. If the tempering of the hook has been successfully accomplished, it will spring back to its original shape. Occasionally the point of a hook when made is turned

slightly inwards, and hence fails to fasten the fish securely ; it can frequently, however, be set at the correct angle in the act of testing.

Take a piece of wax about the size of a small pea, which soften thoroughly by working it between the thumb and forefinger of the left hand. Picking up this piece of wax with the left forefinger, slightly moistened, place the tying-silk on the wax, and, closing the left thumb and forefinger with a slight pressure, draw the silk quickly through the wax. After repeating this action three or four times the surface of the silk will be thoroughly coated with wax. The beginner must expect to break his silk continually when waxing, and nothing but practice will enable him to succeed in acquiring the knack of regulating the pressure of the left thumb and forefinger; it is well, however, to note that, the shorter the length of silk drawn through the wax, the less is the liability of breaking. The silk requires waxing occasionally during the operations of dressing the fly. At all times, when tying, hold the silk firmly between the right thumb and forefinger, and carefully avoid letting them slip down the silk, as this tends to remove the coating of wax. If the tying-silk should break at any time while dressing, wax thoroughly the broken end on the fly as well as a new length of silk ; scarf the new silk to the broken end by twisting them up together, and go on lapping with the scarf for three or four turns, after which

the end of the broken silk may be cut off. In case the broken end is too short to scarf, lay the new silk over the two last turns of the old, and continue lapping, cutting off any projecting ends.

When commencing to lap, hold the end of the waxed silk tightly between the left thumb and forefinger against the shank of the hook, and with the right thumb and forefinger take the silk firmly about four inches from the end; retain the extreme end between the left thumb and forefinger until three laps are laid on the hook-shank. Proceeding as above, work in the middle part of the hook-shank four or five turns of tying-silk close behind each other; at every turn of the silk¹ draw it down as tightly as possible without breaking, as without a firm foundation the wings will infallibly slip or turn out of position.

From each of a pair of starling wings—one right and one left from the *same* bird, if possible, as the length of fibre and colour vary according to the age of the bird—detach a feather. If for a very small fly on a 000 hook, select the second primary quill feather; for any larger hook, the third or fourth. Cut with scissors from each sufficient of the plume, from the side of the feather on which

¹ N.B. All the diagrams of fly-making are magnified, and in these magnified diagrams the relative thickness of the tying-silk is purposely exaggerated in order to give a clearer idea of the method, and the exact number of turns used.

it is the longest, to form a wing (for a dun on a o hook a little more than an eighth of an inch, and for other sizes in proportion), and lay these two wings on the table, taking care not to separate the fibres, or, what is technically called, "*break the wings.*" Place them with the natural inclination of the fibres towards the tail-end of the fly, and the cut side of the plume nearest to you. With the forefinger of the right hand, slightly moistened, pick up the wing for the side of the fly furthest from you, with the darker side (*i.e.* the one on the outer side of the bird's wing) downwards; lay this wing along the forefinger of the left hand. Similarly, pick up the other wing with the outer side upwards, and lay it on the wing already placed on the left forefinger, taking care to keep the points evenly one on the other. Place the left thumb on the points of the wings, and take them by the stump-ends firmly between the right thumb and forefinger, at the same time gently coaxing any disarranged fibres evenly into position with the left hand. Apply the pair of wings to the upper side of the hook, over and close down to the turns of tying-silk previously made in the middle of the hook-shank, judging the position so that the wings when attached will just reach from the neck of the eye to the bend of the hook.

Practice alone will enable the operator to do this accurately, and it is well to note that the invariable

tendency of the beginner in this style of putting on wings is to make them too long. The appearance of a pair of wings in which the points have not been nipped off is preferable, as all feathers naturally become thinner at the points, and thus give the notion of being shaded off, whereas, if nipped off, they have a hard, unnatural outline. Holding the wings and the wire of the hook between the left thumb and forefinger, take the tying-silk in the right hand, and, separating the left thumb and forefinger sufficiently to allow the silk to pass between them, draw the silk down as firmly as possible, at the same time gripping the wings and hook with the left thumb and forefinger so as to draw all fibres down vertically without any horizontal motion. Repeat this operation three or four times, carrying each successive turn of the silk forwards, or towards the head of the fly. Pass the silk once behind the wings and over the hook, and pull it tightly forwards: the fly now appears as shown on sketch (fig. 12).

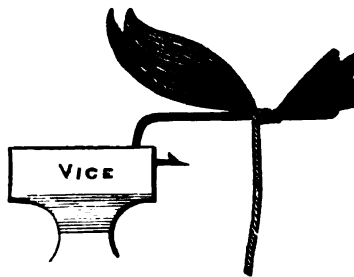


Fig. 12.

Cut away with the scissors as closely as possible the stump-ends of the wings, and, with the nails of the left thumb and forefinger force them with the silk foundation on which they are fastened along the wire close up to the eye. The object of tying the wings on in the first instance in the middle of the shank is to enable the operator to cut the refuse ends of the wings off neatly, which is impossible when they are fixed close up, owing to the projection of the eye being in the way of the scissors. In the case of a fly dressed on an ordinary hook with gut attached this is, of course, unnecessary, and the wings are at once worked on in their proper place. When cutting off any refuse ends of material quite closely, it is a good plan to steady the right hand by resting the little finger against the pillar of the vice.

Strip the downy flue off the root-end of the cock hackle selected (the longest fibre of the hackle of a properly proportioned fly is a trifle shorter than the shank of the hook), lay it along the wire of the hook with the point of the hackle towards the right, and bind it firmly with the tying-silk until about half-way down to the bend of the hook, cutting off diagonally, with the view of tapering the body, any of the quill or root-end of the hackle projecting beyond this point. If a gold or silver tag is required, it is now formed by tying in a short length of flat tinsel and working

three or four turns of it fastened off with two turns of the tying-silk and the refuse ends of the tinsel closely broken off. If the fly to be imitated has setæ or whisks, lay on top of the hook four or five strands of a cock's-beard hackle with the set of the fibres inclining upwards (the beard hackles are three or four coarse-fibred hackles on each side of the throat just below the wattles of the cock); bind them securely in place with successive laps of the tying-silk until the tail-end of the body is reached; take one turn of the silk behind and under the whisk and over the hook, pulling the silk forwards so as to set the tail well up.

Lay along the top of the hook projecting to the left the strand of quill, previously stripped of the flue, of which the body is to be formed; or, if the body be of silk ribbed with tinsel, tie both in similarly in one operation (fig. 13).



Fig. 13.

If the body be of quill, thoroughly wax the silk in order to secure the adhesion of the quill to the hook-shank, but if of silk, avoid waxing, as it darkens the body ; lap the quill or silk with the tying-silk, carrying it in regular laps close up behind the wings : form the body by winding the quill or silk smoothly up to the shoulder, where, fasten it with two turns of the tying-silk, cutting off any refuse of the body material. If the body be ribbed, carry the gold or silver wire in regularly-spaced open folds up to the shoulder, where, secure as before, and break off refuse end (fig. 14).

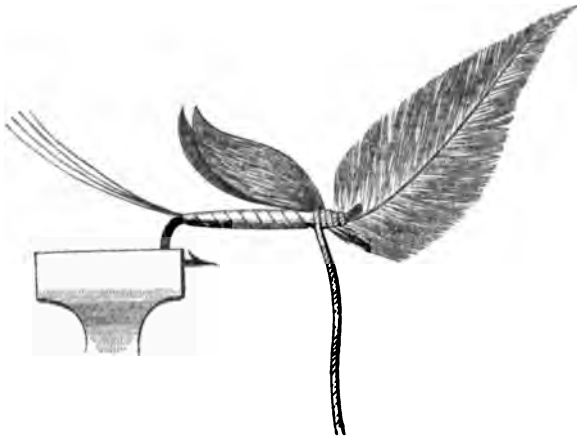


Fig. 14.

Fix the point of the hackle in the pliers, and, taking care to keep it on its edge with the glossy or outer side towards the head of the fly, make

the first turn of the hackle round the body, close up to and behind the wings (fig. 15).



Fig. 15.

Retaining the hackle in the same relative position, and counteracting its natural tendency to twist by keeping the forefinger of the right hand in the ring at the lower end of the pliers throughout the operation of winding the hackle over the body (technically called "turning the hackle"), work each successive turn in front of the one just previously made, until by this action the

wings are gradually forced into a perfectly upright position (fig. 16). In turning the hackle carry

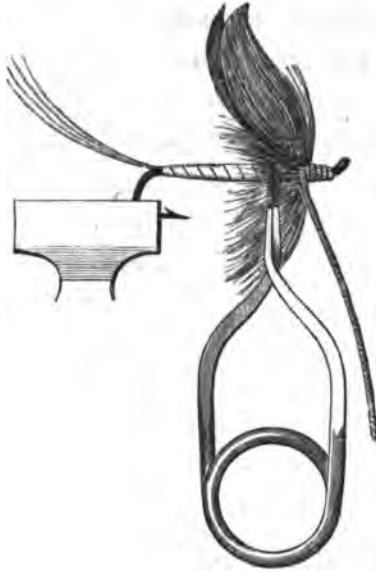


Fig. 16.

the pliers well forward when under the hook in each turn, so as to fill up the space under the wings. Neglect of this precaution gives a very crude appearance to the fly. A fly to float well should have at least four or five turns of hackle round the hook.

Fasten in the point of the hackle with two turns of silk, cut off the projecting point of the hackle, and, carefully coaxing it between the fibres, gradually carry the tying-silk up towards the head so as to take a fold over, and thus secure each successive turn of the hackle. This is a most im-

portant improvement, increasing to a surprising extent the durability of a fly ; and if by any chance in fishing the extreme point of the hackle draws out, it can be cut off, and the remainder of the hackle will not move, so that the fly can still be used. Pass the silk in front of the wings, and take one turn round the neck of the eye. Press



Fig. 17.

the fibres of the hackle into position pointing towards the tail of the fly, and generally arrange them with the dubbing - needle (fig. 17). If the wings are a trifle too long, nip off the extreme point with the nails (but on no account cut them

with the scissors), although, as before stated, this should not be necessary, as the length should be correctly judged when winging.

It is now only necessary to fasten off the fly, and it may be noted that throughout the previous operations not a single knot or hitch has been made. If the silk is kept thoroughly waxed, and the folds drawn down quite tightly, the fly at any stage will remain secure : the continual half-hitches recommended by the old school of tyers are useless, and only give an uneven and lumpy appearance to the work.

I cannot too strongly impress on professionals as well as amateurs the necessity of abandoning the old system of finishing off a fly with a series of half-hitches. True it saves a little trouble, which, to the professional, may be of some importance, but I venture to suggest to them that it is worth a trifling expenditure of time to make the work really secure, a result which can by no possibility be attained by the use of half-hitches.

The "*Whip Finish*" shown in the magnified sketches of the eye-end of the hook is the only really secure and reliable knot to fasten off with. It is made thus :—

Lay the end of the tying-silk back towards the tail so as to form an open-loop, and work one turn of this loop round the neck of the eye (fig. 18).

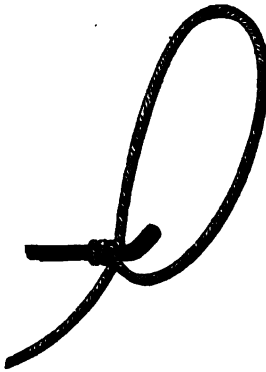


Fig. 18.

Similarly work three more turns of the loop, passing it at each turn over the eye (fig. 19).

Holding the hook and turns of silk firmly between the left thumb and forefinger, draw the end of the tying-silk down with

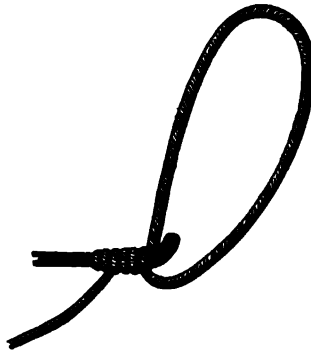


Fig. 19.



Fig. 20.

the right hand until the knot is quite tight (fig. 20). It is essential in this operation to proceed slowly, so as to allow the warmth of the finger and thumb to soften the wax, and thus allow the silk to draw freely. Cut off the remnant of the silk, varnish the knot thoroughly, and if in this operation the eye is filled with varnish, do not neglect to clear it. The fly is now complete.

The use of the fine end of a porcupine quill is recommended both for varnishing and clearing the eye.

For a *flat-winged fly hackled at shoulder only*, as in the case of an Alder, Governor, Grannom, &c.—wing; fasten in root-end of hackle; whisk, if any, and body material; then form and secure body as before (fig. 21).



Fig. 21.

Make the first turn of the hackle in front of the

wings, and then pass the hackle behind the wings (fig. 22).

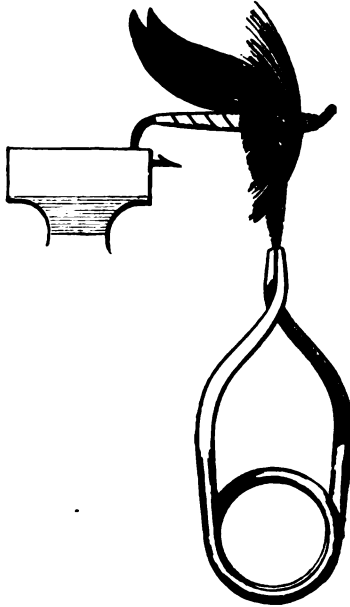


Fig. 22.

Turn the hackle as before, but do not jam the folds of the hackle in front of each other, as the effect of this operation would be to set the wings too upright (fig. 23). In all cases bear in mind that the more turns of the hackle are worked in front of the wings the flatter they lie, and the more turns behind them



Fig. 23.

the more they are forced into an upright position. A judicious use of this principle will ever enable the fly-dresser to correct any little mistake in the angle at which the wings are set on. Fasten in the point of the hackle, carry tying-silk between the turns of the hackle to the head, where, finish as before, and varnish.

For a *flat-winged fly hackled right down the body*, as in the case of nearly all the sedges, follow precisely the same plan of winging and fastening in hackle, selecting, however, a longer and more tapered hackle, and, with the body material, bind in a length of fine gold or silver wire (fig. 24).

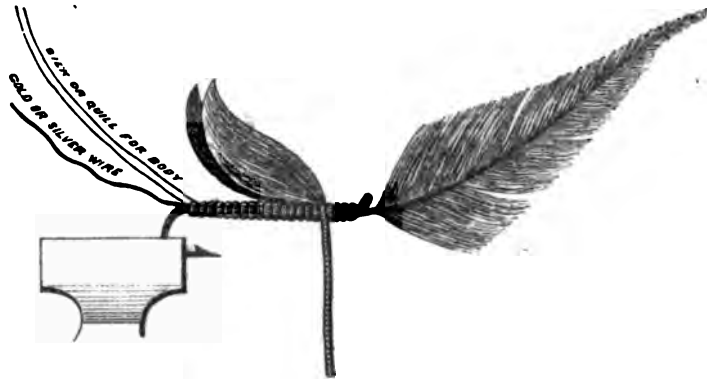


Fig. 24.

Form and secure the body, and, in turning the hackle, let the first turn be in front of the wings and the next two or three close behind them, and then carry the hackle down to the tail-end of the fly

in parallel, sloping, regularly - spaced open turns (fig. 25).

Leaving the pliers hanging on the hackle, first take two or three close turns of the wire tightly round the hackle-point, so as to secure it, and, keeping a steady strain on the wire, work it up between the fibres so as to rib the body the re-

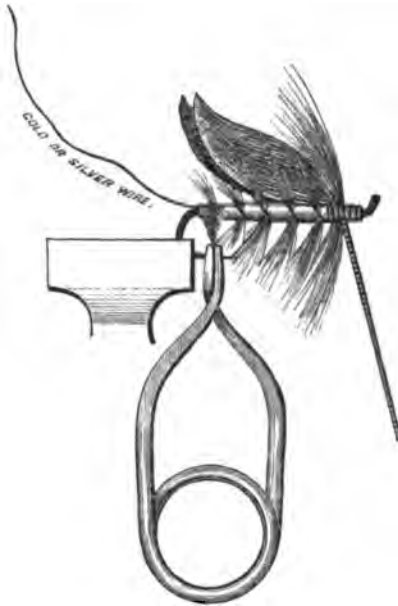


Fig. 25.

verse way over the hackle up to the head, where, fasten in the wire with two or three turns of the tying-silk: break off the remnant of the wire, finish, and varnish as before (fig. 26).



Fig. 26.

In the case of an ordinary *hackle or buzz-fly with silk or quill body*,

take three or four turns of silk at the head; fasten in the root of the hackle; carry tying-silk to tail end of fly, fastening in whisk (if any); set up whisk, and lay body material along the top of

the hook (fig. 27). Fasten in body material, form,

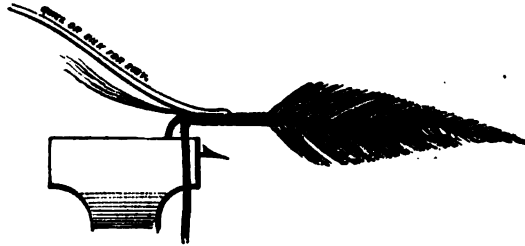


Fig. 27.

and secure body (fig. 28). Turn and fasten in

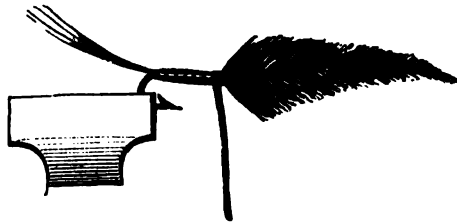


Fig. 28.

point of hackle, carry tying-silk through turns of hackle to head, where finish and varnish (fig. 29).

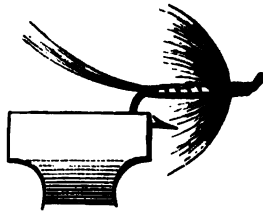


Fig. 29.

If a *buzz-fly with dubbing body*, immediately after setting up whisk well wax the tying-silk. Take sufficient of the dubbing (either fur or crewel)

to form the body, and blend it by breaking it up thoroughly between the fingers. Arrange it into a rough taper about three times the length of the

hook, and twist or spin it on to the tying-silk (fig. 30). Wind the silk with the dubbing on it

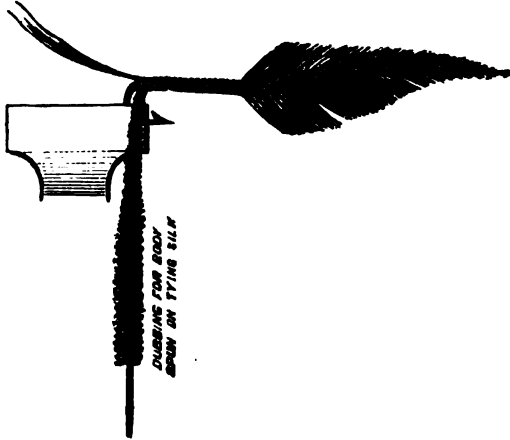


Fig. 30.

up to the shoulder (fig. 31), and, if there is too



Fig. 31.

much dubbing on the silk, draw away the surplus from the silk with the nails of the right thumb and forefinger, and wax the silk well. Turn the hackle, fasten it in, carry the silk to the head, finish, and varnish. Pick out a little of the fur with the dubbing-needle at shoulder, and generally

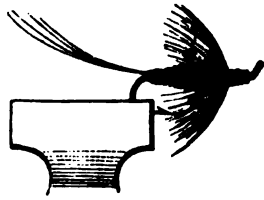


Fig. 32.

trim and arrange the body with the scissors (fig. 32).

The following is Mr. Marryat's method of dressing *Bumbles*, so that they will stand dry-fly fishing; but it is of the utmost importance in

this case to use tying-silk, which, when waxed, is the same colour as the floss silk body of the fly:—

Fasten in the hackle as for an ordinary buzz or hackle fly. Take a length of floss silk for the body, a strand of peacock herl, either bronze or green, according to the pattern-fly, and a piece of fine flat gold tinsel; lay all these on top of the hook at the shoulder, tapering them by cutting off diagonally, and bind them firmly with the tying-silk, carrying it down to the tail-end (fig. 33).

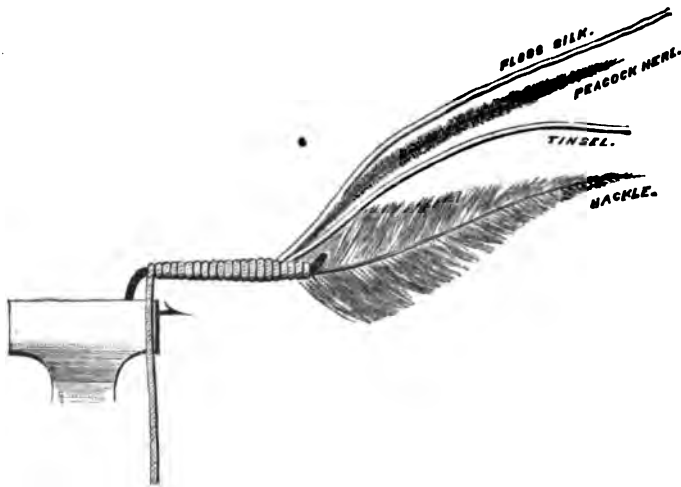


Fig. 33.

Wind the floss-silk evenly down, and secure with one turn of the tying-silk, cutting off closely any remnant of the floss; rib down with open turns of the herl; similarly fasten it in, and cut off any remnant; carry the flat gold down between the ribs of herl; secure, and break off refuse end (fig. 34).



Fig. 34.

In turning the hackle, take three or four close turns at the head, and the remainder in open coils each against and immediately above the ribs of the herl. With the right thumb and fore-finger, draw the fibres of the hackle forwards, so as to set them at right angles to the hook-shank (fig. 35).

Secure the point of the



Fig. 35.

hackle with two turns of tying-silk, which carry up between the fibres of the hackle to the head, where finish and varnish. Cut off the projecting point of the hackle, and press the fibres of the hackle back into position, pointing towards the



Fig. 36.

tail-end of the fly (fig. 36). By this manipulation the hackle may be brought the whole or part of the way down the body, according to fancy.

To Dress Upright Reverse-Winged Duns.

Work four or five turns of well-waxed silk close to the eye of the hook.

Take two feathers from a right, and two from a left wing of a starling, or other bird; cut out the entire plume from each, excepting the extreme points and downy part of the roots of the feathers; lay these as cut on the table, taking care not to disarrange the fibres. Place the two pieces from the right feathers one on the other, with the points quite even along their entire length, and similarly those from the left feathers, in each case pressing the plumes together, so that they will adhere to one another. Lay the two lengths now adhering together from the one wing on the two lengths from the other, with their points quite even along the entire plumes, with the natural

inclination of their fibres sloping towards the tail-end of the fly, and with the darker sides outwards.

Take a pair of long bull-dog pliers of the form shown in sketch ¹ (fig. 37), and, pressing them open



Fig. 37.

by means of the thumb and forefinger of the right hand applied on the portion roughed for this purpose, place the four plumes together between the jaws of these pliers with sufficient width projecting beyond the points to form, when detached, a set of wings. Remove the pressure of the right thumb and forefinger, and the feathers are securely fixed in the position shown on the diagram. The projecting pieces being four wings accurately in position, can now be detached, and when a set of wings is required for the next fly, it is only necessary to press the pliers open and draw the whole of the feathers out sufficiently for the next set of wings. Releasing the pliers, the remainder of the four feathers is kept firmly in place. In this way sufficient feathers can be arranged at one time to make six or eight sets of wings.

¹ This form of pliers is the invention of Mr. Marryat, and can be procured from Messrs. Weiss, surgical instrument makers, Strand.

For single wings it is, of course, only necessary to use the plumes of one right and one left feather.

Having detached the set of wings, place them with the left thumb and forefinger with their points projecting to the right or over the head of the fly; and note that the tendency in this style of winging is to judge them too short. Secure the wings with three or four turns of silk, and carry one turn in front of them and over the neck of the eye (fig. 38).

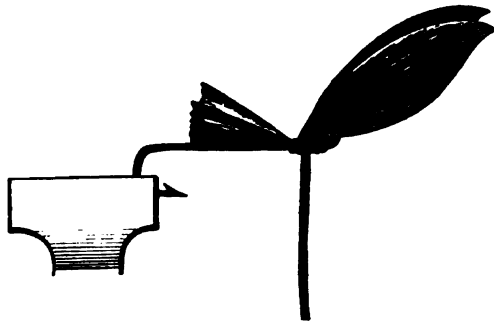


Fig. 38.

If the wings have been properly put on without disarranging the fibres, they will set outwards at the points with two thicknesses of feather in each wing; if, however, a few fibres are out of place, divide the wings carefully with the dubbing-needle. Take the tying-silk in the right hand, and pass it in front of the double wing on the further side from you, then carry it back between the wings, once round the wire of the hook behind the wings,

then forwards between the wings, then round the neck of the eye in front of the wings, and then once more behind the wings, thus forming with the tying-silk the figure 8 with a wing in either loop. Hold the wings firmly in the left hand,



and, with the right, pull the tying-silk down quite tight, and take one more turn behind the wings, which should then be quite upright, and, looking at them "*end on*," set apart at the points in the shape of the letter V (fig. 39).

Fig. 39.

Cut away the stumps of the wings diagonally to taper the body, and fasten in the hackle by the root-end (fig. 40).

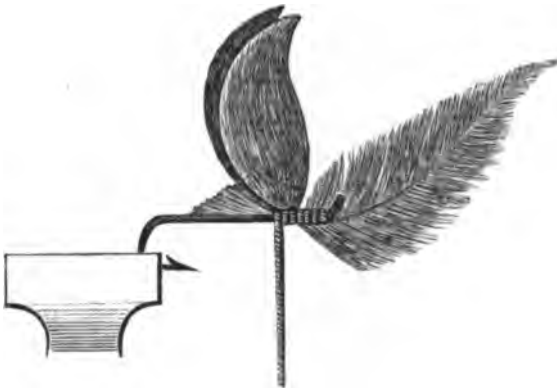


Fig. 40.

Carry tying-silk to the bend of the hook, fastening in and setting up the whisk, secure the quill for body, bring tying-silk to shoulder (fig. 41).

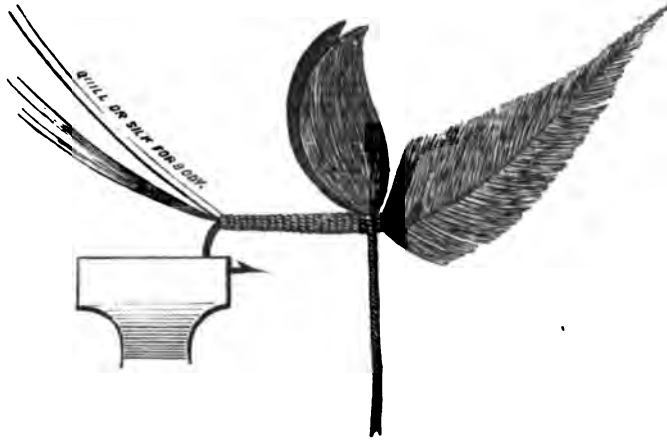


Fig. 41.

Form, and bind in the body, cutting off any remnant (fig. 42).

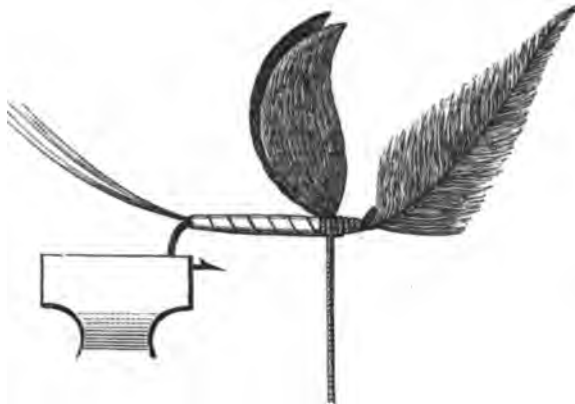


Fig. 42.

Turn hackle, fasten it in, carry tying-silk through it to head, where, finish and varnish (fig. 43).



Fig. 43.

An Improved Method of Winging Upright Duns.

This is considered to be the latest improvement, and the most efficacious mode of setting on upright wings, whether double or single.

Strip off entirely and discard the shorter plume of a pair of starling wing feathers, one right and one left. Pare the central quill running down the feathers as thin as possible with a pair of curved scissors such as are used by oculists. Cut through the quill of each feather at regular intervals, each being of the width required for a wing (fig. 44).

Having worked the silk on close to the eye of



Fig. 44.

the hook, detach **one** if single, and two if double wings from **each** feather; lay them with their points **evenly** one on the other, with the darker side outwards. Holding the wings, and, proceeding as usual, secure them at once in their proper position close to the neck of the eye, and take one turn behind the wings, and over the wire of the hook (fig. 45).

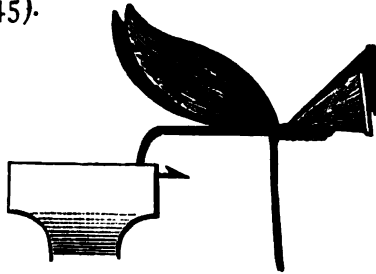


Fig. 45.

Set the stumps of the wings horizontally at right angles to the length of the hook, each stump or pair of stumps (according to whether the wings are single or double) on their proper side, and pull the tying-silk forward between them and under the hook-shank (fig. 46).

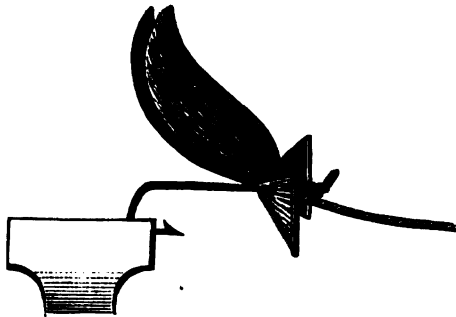


Fig. 46.

Press the stumps tightly back, and bind them firmly behind the wings (fig. 47).

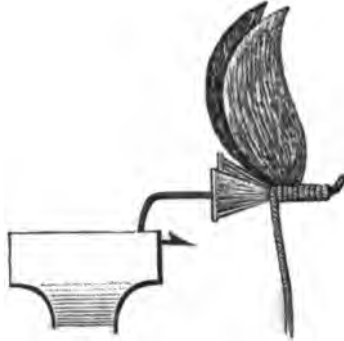


Fig: 47.

Cut the stumps away diagonally to taper the body (fig. 48).

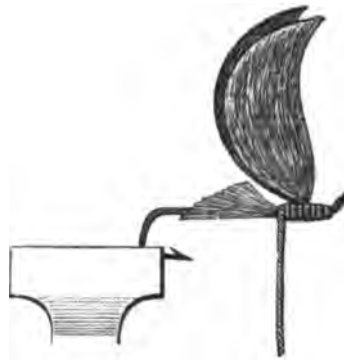


Fig. 48.

The remaining operations being then carried out precisely as described for the upright re-

verse-winged duns, complete the fly as before (fig. 49).



Fig. 49.

To Dress the May-Fly or Green Drake.

Use Pearsall's gossamer silk, doubled, and, having waxed it thoroughly, take five or six turns close behind the eye.

Take a pair of feathers from the back or breast of either a Canadian Summer or Wood duck, an Egyptian goose, or a Rouen drake undyed or dyed to the required tint. Strip the lower fibres from the feathers, leaving only sufficient for the length of wings proportionate to the size of the hook, place them back to back, so that they set apart at the upper ends. Apply them with the left thumb and forefinger to the hook, so that each quill is on the proper side of the hook, and bind

the quill-ends securely, nearly close to the eye of the hook (fig. 50).

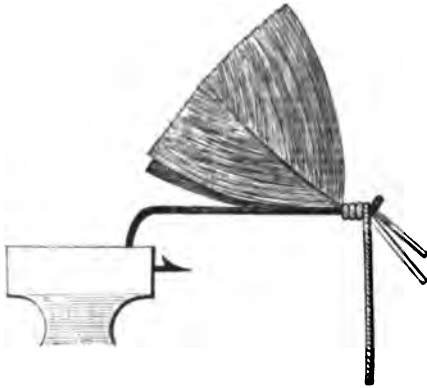


Fig. 50.

Turn these quill-ends back under the hook, drawing them tightly back to set the wings up, and fasten them behind the wings. Form the head by working four or five turns of bronze peacock herl, and secure behind the wings. Take the shoulder hackle from which the downy flue has been already stripped, and, holding the extreme point between the left thumb and forefinger, with the right thumb and forefinger slightly moistened, stroke back the remainder of the plume. (This plan is adopted with all close-plumed feathers

when used as hackles.) Fasten in the hackle by the root-end (fig. 51).

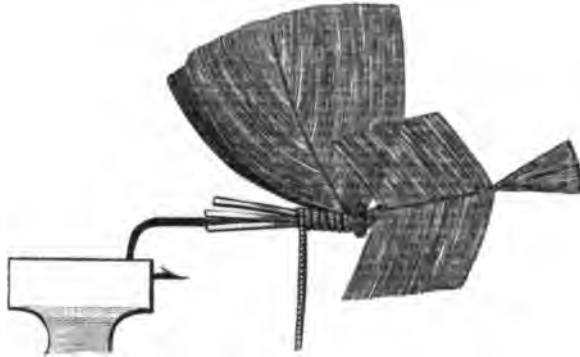


Fig. 51.

Fix the hackle pliers to the point of this hackle, turn it close behind the wings, fasten it in, cut away all refuse ends diagonally to taper the body, carry tying-silk to the bend of the hook, fastening in, and setting up the tail (fig. 52).

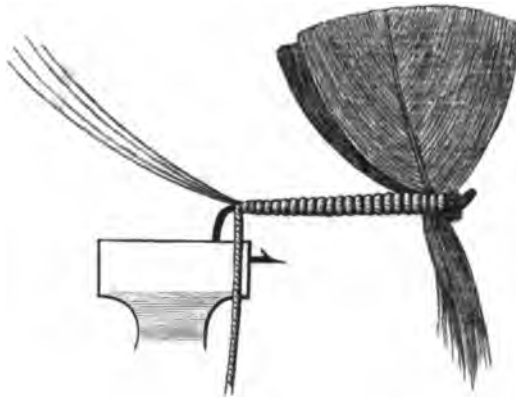


Fig. 52.

Bind the tying-silk up to shoulder, securing at the same time the root-end of the second hackle.

If this second hackle is to be all put on close behind the shoulder hackle, turn it now and fasten in the point. If, on the other hand, it is to be used for ribbing the body, leave it projecting to the right or over the head of the fly, and proceed to prepare the body. Undoubtedly the very best materials for the body of a green drake are either the thin maize, such as is used for making Mexican cigarettes, or a very thin strip of wheaten straw. Whichever is used, first soak it in warm water until quite soft, and then cut out of it a slip of the form shown in the sketch (fig. 53). With the left



Fig. 53.

thumb and forefinger apply it under the hook, so that the join will run up the back of the fly, and, pressing it tightly so as to make it lie round the wire of the hook, fasten it securely at the shoulder with three very tight turns of the tying-silk, rib the body down evenly with the tying-silk, and take two secure turns at the tail-end of the fly (fig. 54).

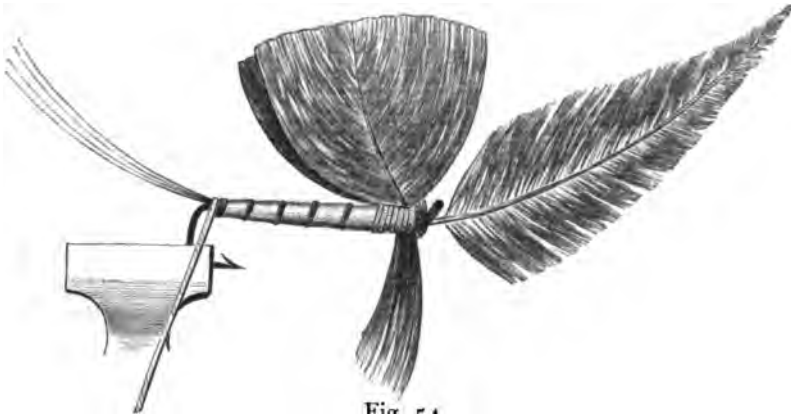


Fig. 54.

Turn the hackle with three or four folds close behind the shoulder hackle, and carry it down in open coils, each close to and in front of the ribs formed by the silk on the straw body (fig. 55).

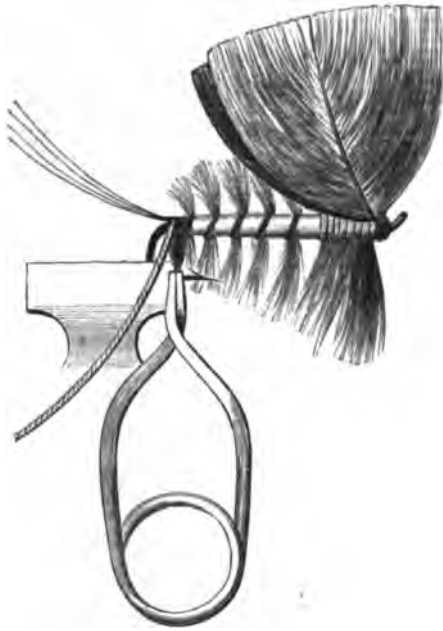


Fig. 55.

Attention to this placing of the turns of hackle close to the ribs is necessary, as otherwise the ribbing hackle is never secure.

Fasten in the point of the hackle at the tail, where fasten off with whip finish and varnish.

Trim the wings to shape with sharp curved scissors (fig. 56).

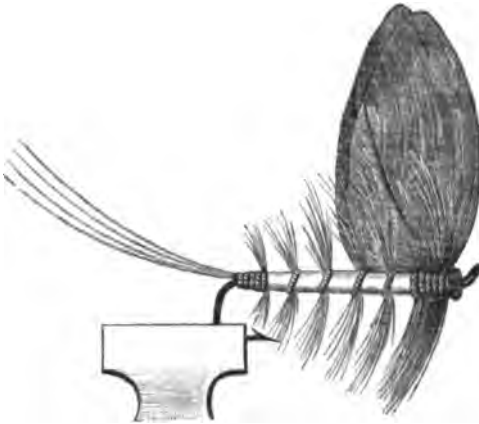


Fig. 56.

To make Detached Bodies.

Take an ordinary bristle such as is used by bootmakers, either natural or dyed, according to the colour of the body of the fly to be imitated. If too thick, split in two from the point. Double it tightly in form shown (fig. 57).

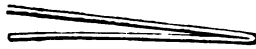


Fig. 57.

Holding the bristle firmly between the nails of the thumb and forefinger of the left hand, take two very tight turns of thoroughly waxed silk close down to the doubled end of the bristle. Lay in position the fibres to form the tail.

For an india-rubber body, take a thin narrow slip of this material, either cut from the ordinary bottle-rubber with a sharp knife previously well wetted, or drawn from webbing such as is used

for braces, selecting in either case a pale-coloured and transparent piece ; lay this along the upper

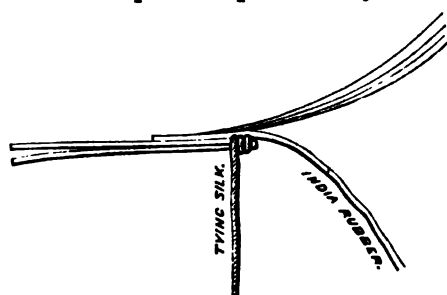


Fig. 58.

side of the bristle with the end of the rubber, of which the covering of the detached body is to be formed, projecting to the right (fig. 58).

Fasten in the whisk and rubber with two turns

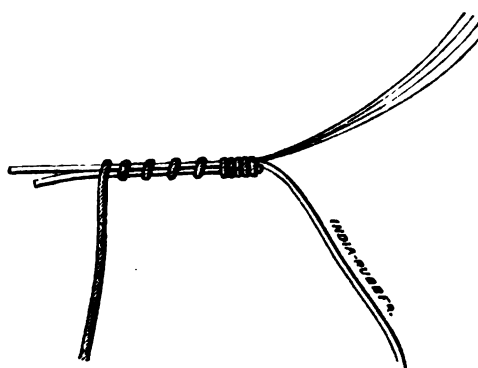


Fig. 59.

of tying-silk, which carry in open coils to the end of the body, judging the length accurately (fig. 59), and particularly noting that the usual

fault of both professionals and amateurs is to make the body too long (as an example for a 00 hook, a quarter of an inch is quite sufficient).

Fix the end of the rubber in the hackle pliers, and, stretching it to its utmost extent, be most particular to make the first turn close down to and over the doubled end of the bristle, and then lay it evenly in successive folds up the body ; secure with

two turns of silk, fasten off with whip finish, and cut off refuse end of the rubber, and any projecting pieces of the whisk fibres. Roll the detached body backwards and forwards on your table with the handle of the dubbing-needle to make it perfectly round (fig. 60).

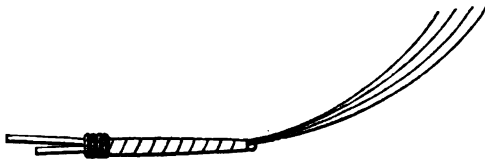


Fig. 60.

Bend the detached body to make the tail-end set up, and it is ready to be attached to the fly.

If the covering of the detached body be of *horsehair*, double the bristle as before, and affix to it well waxed tying-silk as near the colour of the horsehair as possible. Place the whisk and horsehair previously well soaked in warm water in position as before, and fasten them in with the tying-silk. Commencing close to the doubled end of the bristle, lay on four or five turns of horsehair, and, holding it securely in the left hand so that the folds shall not open, take a single turn of the tying-silk round the horsehair and bristle (fig. 61).

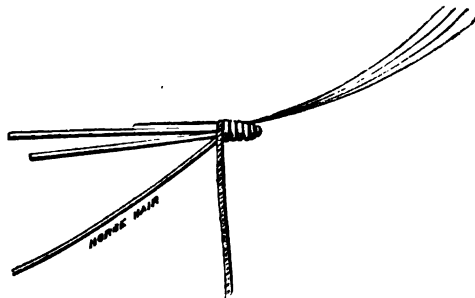


Fig. 61.

Take four or five more turns of horsehair, and then one of the silk, and so on, in succession, until sufficient length of bristle is covered to form the body, when secure the horsehair with the tying-silk, and finish with whip finish (fig. 62). Cut



Fig. 62.

away any projecting ends of horsehair or whisk, roll body on table to make it quite round, and bend body to set the tail up. The single turns of tying-silk give the appearance of the joints of the body, which are prominent features in all the natural flies.

For the *Jenny Spinner* body, select the most transparent bristle and the finest and clearest white horsehair. Use crimson silk, which secure as before at the doubled end. Lay a cream-coloured whisk along the top of the body with points projecting to the right, and the horsehair, softened by soaking in warm water, projecting towards the left. Secure both these with the silk, and make a whip finish. Cut away the tying-silk (fig. 63).

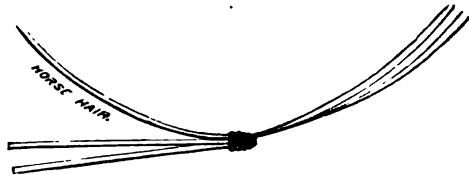


Fig. 63.

Roll the horsehair on, taking care not to cover the red silk at the tail-end ; fasten it off with two or three turns of silk, and finish with the whip finish (fig. 64).

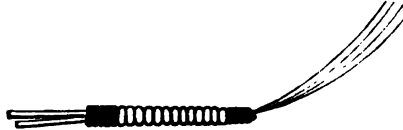


Fig. 64.

For a *Green Drake Body* select the stoutest bristle and horsehair. On the doubled end of the bristle fix the tying-silk, which should be pale yellow, well waxed. Apply the whisk, four or five fibres of brown mallard wing for tail, the soaked horsehair and a piece of doubled maize or wheaten straw round the bristle, and fasten them securely with four or five turns of silk (fig. 65).

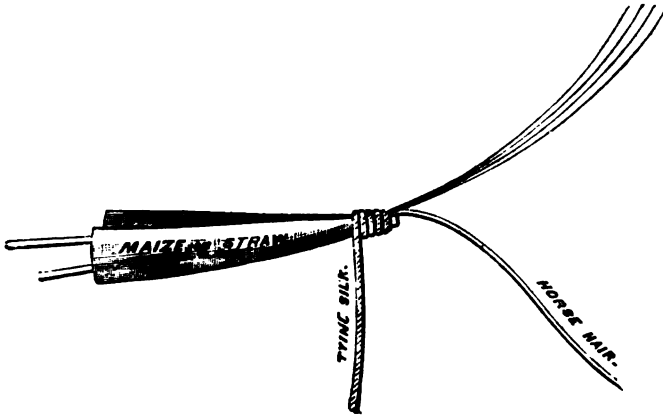


Fig. 65.

Work four or five turns of horsehair close to

the tail-end, and then one turn of tying-silk (fig. 66); then four or five more turns of horse-

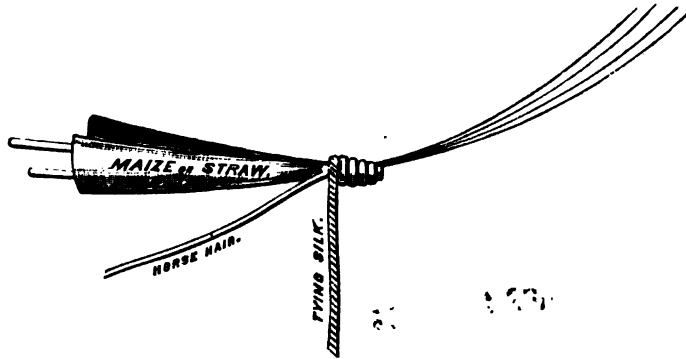


Fig. 66.

hair, and one of the silk, and so on, until the body is completed. Fasten off with the whip finish (fig. 67).

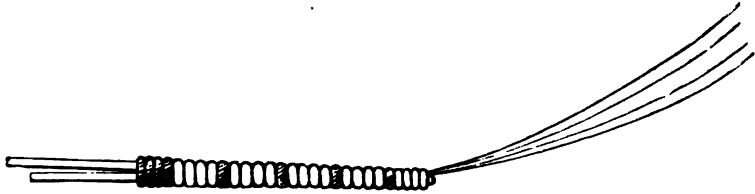


Fig. 67.

The body of the *Spent Gnat* or *Black Drake* is thinner, paler, and more transparent than the above, and hence the maize or straw is usually omitted, and the dark ribs near the tail-end of the body, which are very distinct in the natural fly, are usually imitated by fastening in with the horsehair a piece of peacock herl, and working three or four turns of it round the bristle before commencing to roll on the horsehair.

In all cases note that the whip finish at the end of detached bodies should not be varnished, as, if so, it is almost impossible to attach them securely to the hook, as the tying-silk does not "bite" on the hard varnished surface.

To complete the flies with detached bodies *for a winged dun*, set on the wings in either of the three methods previously indicated; fasten in the root-end of the hackle. Apply the body with the two projecting ends of bristle "à cheval" on the hook, and close up behind the wings (fig. 68).

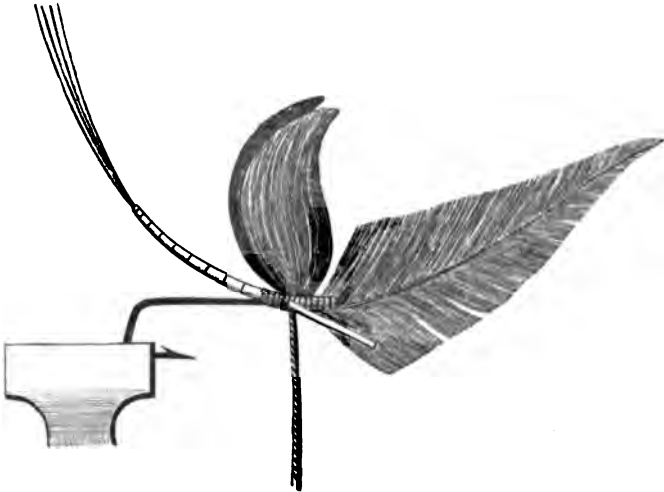


Fig. 68.

It is a good plan to flatten the ends of the bristle slightly between the teeth before applying.

Holding the body securely in position with the left hand, bind down over the ends of the bristle and round the wire of the hook five or six tight turns of the tying-silk, then make one turn of silk

under and behind the body and round the wire of hook, so as to set the tail-end of the detached body well up. Cut away the refuse ends of the bristle not too closely (fig. 69).

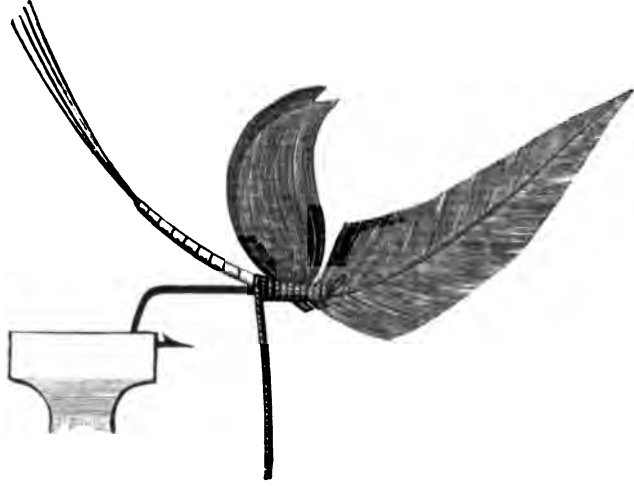


Fig. 69.



Fig. 70.

Take three or four turns of the silk round the body and hook, carrying it towards the shoulder; turn the hackle, fasten in its point, bring silk between the fibres of the hackle to head, where finish with whip finish, and varnish as usual (fig. 70).

For a buzz-fly with detached body, fasten in hackle, tie on body, turn hackle, secure point of hackle, finish at head, and varnish as before.

To make the *Detached-Bodied May-Fly*, wing, head, fasten in, and turn shoulder hackle, as in dressing an ordinary May-fly. Trim wings with scissors, either before winging or at this stage; fasten in root-end of cock's hackle, and apply detached body in the same manner as described for the detached dun (fig. 71).

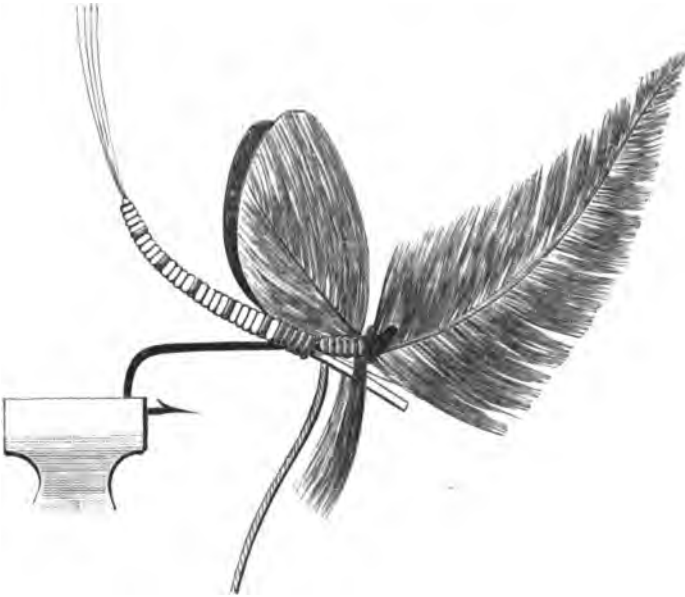


Fig. 71.

Securely fasten on the detached body, taking plenty of turns of silk to make quite sure of its

being fast, and cut away the ends of bristle not too closely (fig. 72).

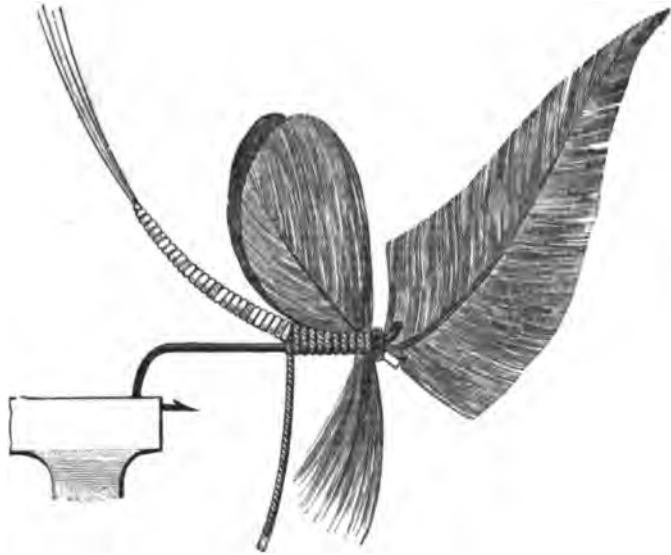


Fig. 72.

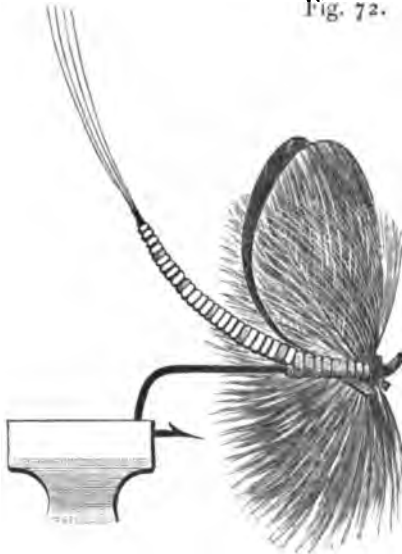


Fig. 73.

Turn hackle, fasten it in, carry silk to head, where finish with whip finish (fig. 73).

In this case it is not practicable to varnish the knot, owing to the peacock-herl head.



CHAPTER V.

ON ARTIFICIAL FLIES.

VHETHER, as stated by Ronalds and other early professors, the different shades of blue, olive, and yellow dun, iron blue, pale evening, and July dun, March and Turkey brown, green drake and dark mackerel, are each distinct and separate varieties, or whether, as asserted by Foster, the blue, olive, and yellow dun, and the other flies enumerated above, are, in fact, the same insects, but slightly altered in tint according to the season, temperature, and other natural causes, is a very difficult point to determine. I am, however, inclined to share the opinion held by Foster, having frequently found in the case of the olive dun, the fly *par excellence* in the south of England, that even on consecutive days in the spring, with an increase of temperature the colour has become many shades lighter, and more watery in appearance, and on a corresponding decrease of temperature taking place, the fly has hatched of a darker colour and more opaque in texture.

This work not being in any way intended as a treatise on entomology, and the classification of the natural flies according to Order, Family, Genus, and Species having been so thoroughly and accurately explained by Ronalds, it is not proposed to touch on this branch of the subject. The flies bred in the water may, with very few exceptions, be considered as belonging to one of two great families, the Ephemeræ and Phryganidæ.

The Ephemeræ, to which family all the duns, May flies, and in fact all upright winged flies, according to the authority of modern entomologists, belong, are hatched in the opaque-winged or "pseud-imago" state, and, excepting in the case of the May flies, are, in this state, usually styled "duns." After a short time, varying in different species, and increased or diminished according to temperature, moisture, &c., from a few hours to two or even three days, they shed the whole of their external covering of wings, body, legs, and even tail, and emerge in the transparent-winged spinner or "imago" dress. The colour of the body has usually changed very considerably, the *setæ* or tail increased in length to an extraordinary extent, the wings are transparent, and the fly is altogether more delicate in outline and more brilliant in hue.

Thus the various shades of the olive dun in its perfect state become red spinners, with bodies of all tints of red brown, from a pale burnt sienna to a dark crimson; and the iron blue, unswathed of its

comparatively sombre dress, appears as the fairy-like Jenny spinner, with a body glassy and colourless in the middle, and a red-brown or orange patch at the tail and shoulder. These spinners when dancing up and down, occasionally just touching the surface of the water, are in the act of laying their eggs, which at once sink and adhere to the gravel in the bed of the river, and the spinner, having fulfilled its duty, falls lifeless on the stream. In due time these eggs are hatched in the shape of a very active grub without any sign of wings, which preys on all kinds of minute aquatic insects. The grub in its turn becomes a pupa or larva, in shape resembling the fully-developed fly without wings, but with the addition of two dark-coloured glossy excrescences at its shoulders, which are, in fact, the wings folded up in a pair of protecting coverings. When fully developed, the larva rises to the surface of the water, splits open the gauzy skin in which it is enveloped, and, after balancing itself for a moment on the empty case, emerges, floating down the stream with its wings erect and its tapering body and tail curved upwards. If it does not fall a prey to one of its many enemies—fish or bird, trout or grayling, swallow or martin—as soon as its wings are dry, it essays a short first flight, in which it is too often seized by the open-mouthed swift; if, however, it eludes this last danger, it reaches the thick sedge on the bank in safety, to become, in its turn, a spinner or perfect fly,

and thus the reproduction of the species proceeds.

The Phryganidæ, to which large family the majority of the flat-winged flies, bred in the water, belong, present very marked characteristics; the wings, four in number, are much longer than the body and lie flat along the back. The body, when compared to that of an Ephemera, is thick, short, and tapered very slightly; there is no tail, but two long feelers project from the head. Soon after the eggs are hatched, the grub, commonly known as a "caddis," commences collecting a most extraordinary conglomeration of all sorts and descriptions of pieces of stone, gravel, stick, sedge, &c., out of which it proceeds to construct a case of such dimensions and proportions, that it is just able to house itself comfortably in it. The tiny atoms of which this case is built are cemented together by a glutinous compound which exudes from the grub itself; the thin end of the case, corresponding to the tail-end of the grub, is closed, and from the other end the head and a considerable portion of the body of the grub may be seen protruding as he is crawling along on the gravel of a shallow, dragging his little house after him. The selection and distribution of the materials of which the case is constructed are so carefully selected that the presence of a single bubble of air will cause the entire structure, with its inmate, to rise and float, tail upwards, on the surface of the water, while at

the smallest alarm the air-bubble is expelled and the grub in its case sinks to the bottom. When about to hatch, the grub closes the head-end of the case, and remains in a torpid state for a short time, after which it crawls out of its house to the bank, and emerges a fully-formed fly. This, the modern recognized theory of the life-history of both "*Ephemeræ*" and "*Phryganidæ*" cannot, however, be considered as satisfactorily solved until further scientific investigation of the subject has been carried out, seeing that the experience of practical fishermen goes to throw doubt on many minor points.

It may be considered by many readers that the number of artificial flies illustrated in this work is excessive, and beyond the requirements of any ordinary fly-fisher. All the varieties described are certainly not absolutely necessary, but it has been, as far as possible, my aim to include all the patterns which I have, by practical experience, found killing ones on the Test and other chalk streams. In all cases the fullest information as to the successive processes of making these flies, as well as the materials to be used, and the various methods of preparing and dyeing these materials, is given, either in the chapter specially devoted to that subject, or, where necessary, in a paragraph immediately following the description of the fly itself.

Every angler who wishes to achieve success takes a continual and daily increasing interest in

the study of the habits of the fish, of the portions of the stream they frequent, and of the insects on which they feed; and to him the advice is earnestly proffered, to learn to dress his own flies, if only for the purpose of making the pattern from the natural insect, with a view of getting them subsequently copied by professional fly-dressers, whose mistakes he will more easily be able to detect and correct from having himself an intimate knowledge of the manipulation of fly-tying.

I do not pretend to have invented any of the various processes, either of constructing the flies, or preparing or dyeing the materials used, nor is there, with a few exceptions, any claim on my part to novelty in the particular patterns. From the best sources, professional and amateur, I have striven to collect and select the most useful and most killing artificial flies, and leave to the practical fisherman the choice of such as accord with his fancy, and free permission to discard any he does not consider suitable for the particular stream he is in the habit of fishing; nothing, in my opinion, so much contributing to the success of a pattern or dressing as a firm conviction in the mind of the fisherman that it is the very best of its sort.

The omission of so well-known a fly and one so deadly in ordinary streams as the March brown, cannot be passed over without a few words of comment. I have never seen this particular example of the Ephemera family on the Test,

Anton, or Itchen, in any number, nor have I ever found the fish feeding on it. Time after time a minute examination of the contents of their stomachs has failed to bring to light a single specimen of this insect, in any chalk-stream trout or grayling; hence I plead guilty to a want of experience of its killing powers, and a complete ignorance of the best methods of imitating it.

LIST OF ARTIFICIAL FLIES.

1. ROUGH OLIVE.

Wings. Dark starling.

Body. Heron herl, dyed in No. II., ribbed with fine gold wire.

Hackle and Whisk. Dyed in No. III.

Hook. o or oo.

A very good pattern of the earliest spring olive dun, and for a variety may be winged with pale coot.

2. INDIA-RUBBER OLIVE.

Wings. Medium starling.

Body. A thin slip of india-rubber ribbed with fine gold wire.

Hackle and Whisk. Dyed in No. II.

Hook. o, oo or ooo.

This is one of Mr. H. S. Hall's patterns, and a

very good dressing of the April tint of olive dun, the india-rubber body being particularly effective in appearance.

3. DETACHED OLIVE.

Wings. Medium or light starling.

Body. A thin slip of india-rubber, worked over an undyed doubled bristle.

Hackle and Whisk. Dyed in No. II.

Hook. o, oo or ooo.

For darker tints, dye the bristle in No. II. and the hackle and whisk in No. III., winging with medium or dark starling. Probably the best imitation of the natural olive extant, but very difficult and troublesome to dress.

4. DARK OLIVE QUILL.

Wings. Dark or medium starling.

Body. Peacock quill, dyed in No. I.

Hackle and Whisk. Dyed in No. III.

Hook. o, oo or ooo.

5. MEDIUM OLIVE QUILL.

Wings. Light starling.

Body. Peacock quill, dyed in No. VIII.

Hackle and Whisk. Dyed in No. II.

Hook. o, oo or ooo.

6. PALE OLIVE QUILL.

Wings. Palest starling.

Body. Quill from young starling wing or pale condor, dyed slightly in No. VIII.

Hackle and Whisk. Very slightly dyed in No. II.

Hook. oo or ooo.

Nos. 4, 5, and 6 are considered by many anglers a sufficient variety of the different shades of olive dun throughout the year, and either of them can, for a variety, be dressed with a flat gold tag, or the bodies ribbed with fine gold wire. On some rivers the darker shades of olive quill are winged with pale coot, or snipe, in place of starling.

7. PALE OLIVE DUN.

Wings. Pale starling.

Body. Pale yellowish olive floss silk, ribbed with fine white silk or, better still, white hair, that from the Polar bear being the very best.

Hackle and Whisk. Dyed in No. II.

Hook. o, oo or ooo.

8. HARE'S EAR QUILL.

Wings. Pale or medium starling.

Body. Peacock quill, dyed in No. VIII.

Legs. Hare fleck (from outside shoulder of the hare).

Whisk. White or pale yellow cock's beard hackle, dyed in No. II.

Hook. o, oo or ooo.

A very good summer pattern of pale olive.

In dressing this fly, wing as usual: spin the hare fleck between the ends of a short length of pale yellow tying-silk, as previously described (p. 12), fasten this to the shank of the hook like an ordinary hackle, then proceed to bind in whisk and quill for body; work and fasten in body, holding the hare-fleck hackle in the pliers; take three or four turns of it at shoulder close behind the wings; secure the end of this imitation hackle, carry tying-silk between the turns of it to the head; where finish and varnish. Arrange, and if necessary, pick out the hare-fleck with the dubbing-needle to form legs.

9. DRAKE'S EXTRACTOR.

Wings. Light starling.

Body. Pale yellow olive floss silk, ribbed with fine gold wire.

Hackle. Carried down the entire length of the body, from shoulder to tail; a white cock's hackle, dyed in No. I.

Whisk. Cock's beard hackle, dyed in No. I.

Hook. o, oo or ooo.

This fly was invented by, and named after the late Mr. Drake, a celebrated Hampshire amateur.



Rough Olive.



India Rubber Olive.



Detached Olive.



Dark Olive Quill.



Medium Olive Quill.



Pale Olive Quill.



Pale Olive Dun.



Hare's Ear Quill.



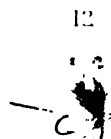
Drake's Extractor.



N° 1 White-burch.



Flight's Fancy.



Goose-Dun.

... and

like

of the

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where finish and var are float and int , and r is a float in the range $[0, 1]$ and d is a float in the range $[0, 1]$.

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion. The number of people aged 65 and over is expected to increase from 200 million to 400 million. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion.

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... I.

ged in No. I.

The *Journal of the American Medical Association* is named after its founder, Dr. J. C. Williamson.

non... ..

1



Rough Olive.

2



India Rubber Olive.

3



Detached Olive.

4



Dark Olive Quill.

5



Medium Olive Quill.

6



Pale Olive Quill.

7



Pale Olive Dun.

8



Hare's Ear Quill.

9



Drake's Extractor.

10



No 1 White-barch.

11



Flight's Emery.

12



Goose Duck.

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ASTOR, LENOX AND
TILDEN FOUNDATIONS.

10. NO. 1 WHITCHURCH.

Wings. Pale starling.

Body. Primrose floss silk.

Hackle and Whisk. Pale sandy ginger.

Hook. o, oo or ooo.

A favourite fly with the members of the Whitchurch Club, and a successful example of the pale olive or yellow dun. I am indebted to Messrs. Eaton and Deller for this pattern.

11. FLIGHT'S FANCY.

Wings. Palest starling.

Body. Very pale yellow floss silk, ribbed with fine flat gold.

Hackle and Whisk. Pale buff Cochin cock hackle, or pale honey dun for a variety.

Hook. o, oo or ooo.

This pattern, originated by and named after Mr. Flight of Winchester, kills well throughout the hot weather, but is specially useful during the rise of May-Fly, when a pale delicate dun of this colour is generally on the water, and at times is taken even in preference to the May-Fly itself.

12. GOOSE DUN.

Wings. Palest starling.

Body. A single strand from plume of a grey goose pinion feather slightly dyed in No.

11., and ribbed with fine gold wire.

Hackle and Whisk. Dyed lightly in No. I.

Hook. oo or ooo.

This is Major Turle's rendering of the palest of olive duns.

13. DETACHED IRON BLUE.

Wings. Tom-tit tail.

Body. A thin slip of india-rubber, worked on a doubled bristle fully dyed in Crawshaw's "Purple."

Hackle and Whisk. Dark honey dun.

Hook. oo.

14. IRON BLUE, A.

Wings. Tom-tit tail.

Body. Peacock quill dyed in No. VI., or a strip of the quill from one of the outside small feathers of a Coot wing, which will be found to be exactly the right shade.

Hackle and Whisk. Dark blue Andalusian.

Hook. oo.

15. IRON BLUE, B.

Wings. Tom-tit tail.

Body. Pale mole fur, ribbed with yellow silk.

Hackle and Whisk. Honey dun.

Hook. oo.

16. IRON BLUE, C.

Wings. Tom-tit tail.

Body. Peacock quill dyed in No. III.

Hackle and Whisk. Dyed in No. III.

Hook. oo.

Tom-tit feathers are most difficult to obtain, and hence as a substitute a dark starling wing feather dyed in No. VII. may be used for the wings of any of the iron blues.

Nos. 13, 14, 15 and 16 are all excellent patterns of the Spring iron blue dun, a fly which is usually taken by the trout in preference to any other in streams where it hatches in any quantity. No. 16 must not be confused with the blue-winged olive, No. 36, which is essentially an evening fly during the late summer and early autumn, and much larger than any iron blue.

17. ADJUTANT BLUE.

Wings. Medium starling, or pale coot.

Body. A strand from the pinion or tail feather of an Adjutant.

Hackle and Whisk. Blue Andalusian.

Hook. oo or ooo.

The strand of Adjutant is stripped on one edge only, by tearing down the longer flue with the thumb and forefinger of the left hand. If not procurable, a strip of quill from the pinion feather of an oldish starling can be substituted, although not so good an imitation as the Adjutant. This is the October tint of iron blue.

18. BLUE QUILL.

Wings. Light starling.

Body. Peacock quill undyed.

Hackle and Whisk. Pale blue dun.

Hook. o, oo or ooo.

For a change, dress with very pale honey dun hackle—an old favourite with dry-fly fishermen. It is a winged example of the celebrated Devonshire “Blue Upright.”

19. BLUE DUN.

Wings. Light starling, or snipe, for a change.

Body. Pale mole fur, or fur from a water-rat, spun on primrose silk.

Hackle and Whisk. Pale blue dun.

Hook. o, oo or ooo.

This well-known pattern is given, although the majority of modern Anglers prefer the variety of the same fly previously given, No. 18, the disadvantage of dubbing bodies being the difficulty experienced in drying them after being once thoroughly sodden.

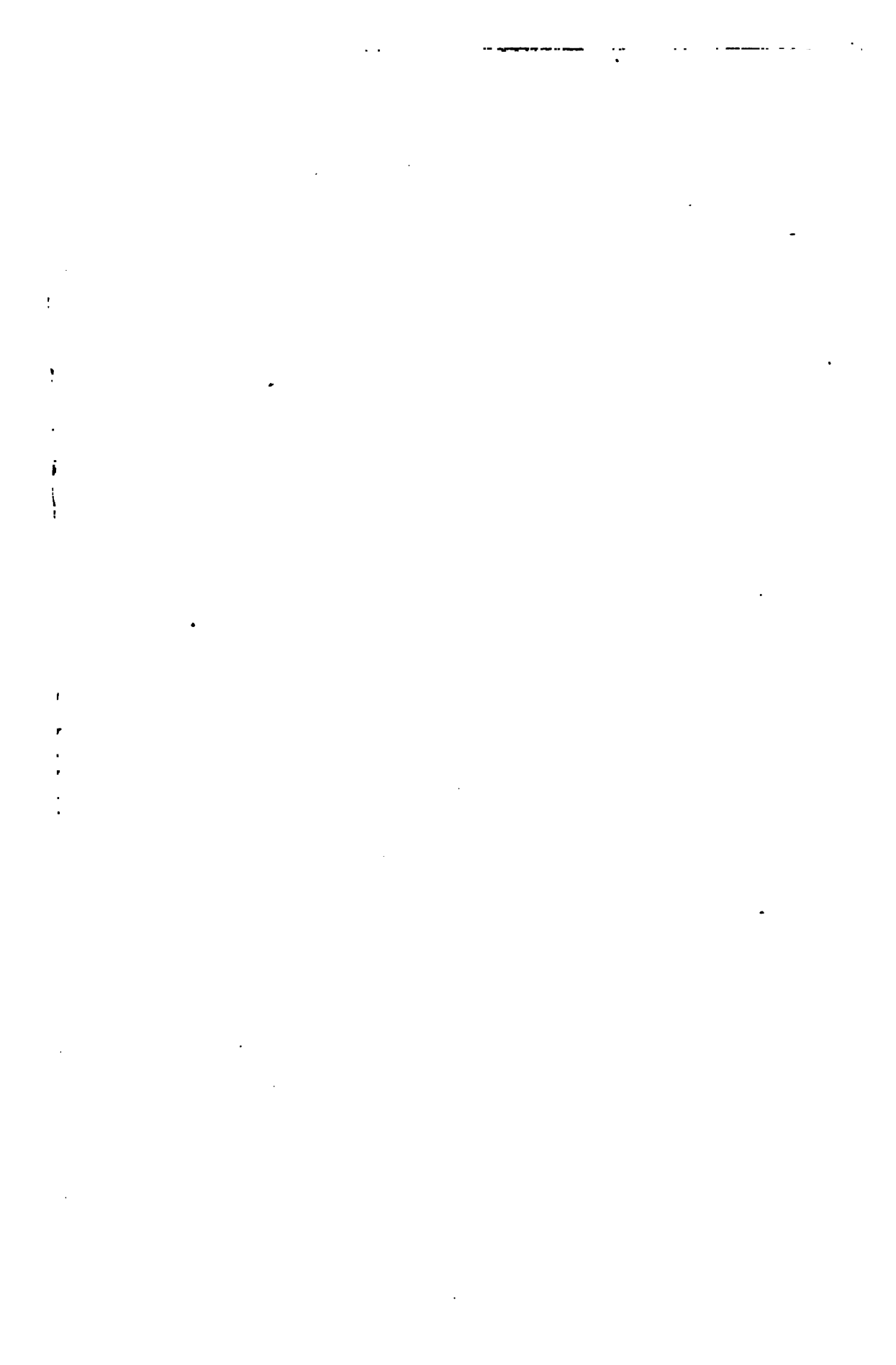
20. AUTUMN DUN.

Wings. Snipe.

Body. Heron herl undyed.

Hackle and Whisk. Palest blue dun.

Hook. oo or ooo.



TRIAL FLIES.

curling.

Well undyed.

1. Pile like dun.

2.

3. With very pale honey dun

4. As with dry-fly fishermen.

5. As the celebrated Devon-

6. In fig. or snipe, for a

7. Or for from a water-
silk.

8. Blue dun.

9. As given, although the
10. I prefer the variety of
11. As given, No. 18, the dis-
tinctness being the quality
12. them after being once

13. As a blue dun.

Plate II.

13



Detached Iron Blue.

14



Iron Blue A.

15



Iron Blue B.

16



Iron Blue C.

17



Adjutant Blue.

18



Blue Quill.

19



Blue Dun

20



Autumn Dun.

21



Golden Dun

22



Hares Ear.

23

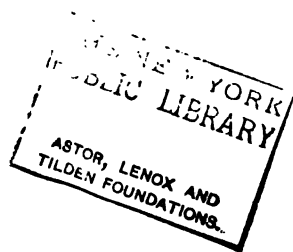


Gold Ribbed Hares Ear.

24



Salton.



This is the dressing of the pale blue dun, so frequently seen during the autumn.

21. GOLDEN DUN.

Wings. Pale coot.

Body. Flat gold.

Hackle and Whisk. Dark blue Andalusian.

Hook. oo or ooo.

Very successful with both trout and grayling when feeding on "smuts," as the various shades of black gnat and midge are frequently styled.

22. HARE'S EAR.

Wings. Pale starling.

Body. Pale primrose silk.

Legs. The lightest fur from a hare's face spun on pale yellow tying-silk, and worked as a hackle.

Whisk. Four or five strands of a ginger cock's-beard hackle.

Hook. o, oo or ooo.

Ogden's original pattern.

23. GOLD-RIBBED HARE'S EAR.

Wings. Medium or pale starling.

Body and Legs. The body is formed of dark fur from a hare's face, ribbed with fine flat gold, and the hare's fur picked out at shoulder to form legs.

Whisk. Red cock's beard hackle.

Hook. o or oo.

This is probably the most killing pattern of the present day in the Test and other chalk-streams ; in fact, one of the most skilful and successful anglers in the county of Hants scarcely ever uses any other dun, from the opening of the season in March until the closing of the river. It is equally efficacious for trout and grayling.

24. SALTOUN.

Wings. Palest starling.

Body. Black silk, ribbed with silver wire.

Hackle and Whisk. Pale ginger cock.

Hook. oo or ooo.

A very useful summer fly, invented by and named after the late Lord Saltoun, a prominent member of the old Stockbridge Club.

25. RED QUILL.

Wings. Pale or medium starling.

Body. Peacock quill dyed in No. IX.

Hackle and Whisk. Red game cock.

Hook. o, oo or ooo.

A larger size, dressed on a No. 2 hook, is found very killing just after dusk. This pattern is a great improvement on the old-fashioned red quill, with body of undyed peacock, and, for a variety, can be made with the addition of a flat gold tag.

The red quill is one of the sheet anchors of a dry-fly fisherman on a strange river, when in doubt.

26. RED SPINNER.

Wings. Honey dun cock-hackle points.

Body. Peacock or Adjutant quill dyed in

No. IX. and ribbed with fine gold wire.

Hackle. Black butted red game cock.

Whisk. From a pale cream-coloured Dork-
ing cock hackle.

Hook. o, oo or ooo.

Mr. Marryat's well-known pattern.

27. DETACHED RED SPINNER.

Wings. Honey dun cock-hackle points.

Body. Foundation of doubled bristle dyed
in No. IX. ; white horsehair also dyed
in No. IX., worked over this foundation,
and the body ribbed with crimson tying-
silk.

Hackle. Red game cock.

Whisk. Pale cream colour.

Hook. o, oo or ooo.

An improvement on No. 26.

28. CLARET SPINNER.

Wings. Pale starling.

Body. Claret floss silk ribbed with fine gold
wire.

Hackle. Red game cock.

Whisk. Pale cream colour.

Hook. o, oo or ooo.

Nos. 26 and 27 are evening patterns of the red spinner, but in the early morning, especially in hot weather, the claret spinner will frequently be found a more killing fly.

29. GINGER QUILL.

Wings. Palest starling.

Body. Peacock quill dyed very slightly in No. IX.

Hackle and Whisk. Pale brown ginger.

Hook. 0, 00 or 000.

A very good dressing of the pale tints of dun so prevalent during the hot weather.

30. BADGER QUILL.

Wings. Pale starling.

Body. Black quill from chaffinch tail.

Hackle. Badger cock (dark brown, nearly black centre, and cream-coloured points).

Whisk. Pale cream colour.

Hook. 00 or 000.

This is probably taken for the very dark, nearly black spinner, occasionally out in the evenings at the end of April and later in the season.

31. WICKHAM.

Wings. Medium or light starling.

Body. Flat gold ribbed with fine gold wire.

Hackle. Bright red Bantam cock carried from shoulder to tail.

Shi 紅綢 (Red silk).

Shi 紅綢 (Red silk) with fine gold work.

Shi 紅綢 (Red silk) with fine gold work.

from the head to tail.

Plate III.

25



Red Quill.

26



Red Spinner.

27



Detached Red Spinner.

28



Claret Spinner.

29



Ginger Quill.

30



Badger Quill.

31



Wickham.

32



Pink Wickham.

33



Cinnamon Quill.

34



Indian Yellow.

35



Little Mayvot.

36



Blue Winged Olive.



Whisk. From bright red Bantam cock's beard hackle.

Hook. o, oo, or ooo.

In dressing this and the succeeding fly, No. 32, wing as usual, secure root-end of hackle, tie in whisk, then fasten in flat gold for body, and gold wire for ribbing; carry the tying-silk to shoulder, form, and fasten in the flat gold body. Turn the hackle two or three turns close behind the wings, and carry it in open, regularly-spaced coils to tail-end of the fly, where secure it with two turns of the gold wire; rib up the body with the gold wire between the turns of hackle to head, where fasten in the wire; finish and varnish as usual. This most useful fly, if dressed by the above improved method, will last out three or four of the ordinary shop flies, in which the extreme ends of the hackle only are secured.

32. PINK WICKHAM.

Wings. Landrail.

Body.

Hackle and Whisk. } As No. 31.

Hook.

A most successful pattern for "smutting" fish when dressed on very small hooks, oo or ooo.

33. CINNAMON QUILL.

Wings. Pale starling.

Body. The root-ends of some strands of

peacock herl when stripped are exactly this colour, but if such are not procurable, bleach an ordinary peacock eye in Dioxide of Hydrogen, and dye it slightly in No. IX.

Hackle and Whisk. Pale sandy ginger.

Hook. o or oo.

This is one of the many brown-tinted autumn or winter duns, and for a variety can be dressed with pale coot wings. It is essentially a grayling fly for August, September, and even October.

34. INDIAN YELLOW.

Wings. Inside grouse wing from a young bird or pale coot.

Body. Floss silk about the colour of natural Russia leather, ribbed with bright lemon-coloured tying-silk.

Hackle and Whisk. Pale buff - coloured Cochin cock.

Head. Three or four turns of orange tying-silk.

Hook. o or oo.

Mr. Aldam's pattern, and an excellent one, especially for grayling.

35. LITTLE MARRYAT.

Wings. Palest starling.

Body. Fur from flank of the Australian opossum.

Hackle and Whisk. Pale buff Cochin cock.

Hook. oo or ooo.

Mr. Marryat's imitation of the pale watery dun prevalent in August, September, and October.

36. BLUE-WINGED OLIVE.

Wings. Pale coot.

Body. Peacock quill dyed in No. II.

Hackle and Whisk. Dyed in No. II.

Hook. o or oo.

This dun hatches chiefly in the evenings during the latter part of July, August, and occasionally even September.

Nos. 1 to 36 inclusive are upright winged duns.

37. HACKLE RED SPINNER.

Hackle. Honey dun cock over three or four turns of black ostrich at shoulder.

Body. Peacock or Adjutant quill dyed in No. IX., ribbed with fine gold wire.

Whisk. Pale cream colour.

Hook. o or oo.

38. BROWN BADGER.

Hackle. Badger cock.

Body. Peacock quill dyed in No. IX.

Whisk. Pale cream colour.

Hook. o or oo.

Nos. 37 and 38 are two of Mr. Marryat's patterns of red spinner.

39. DETACHED BADGER.

Hackle. Badger cock.*Body.* White horsehair dyed in No. IX. worked over a foundation of doubled bristle also dyed in No. IX., and the body ribbed with crimson tying-silk.*Whisk.* Pale cream colour.*Hook.* o or oo.

Without wishing to appear egotistical, I consider this the best imitation yet produced of the red spinner.

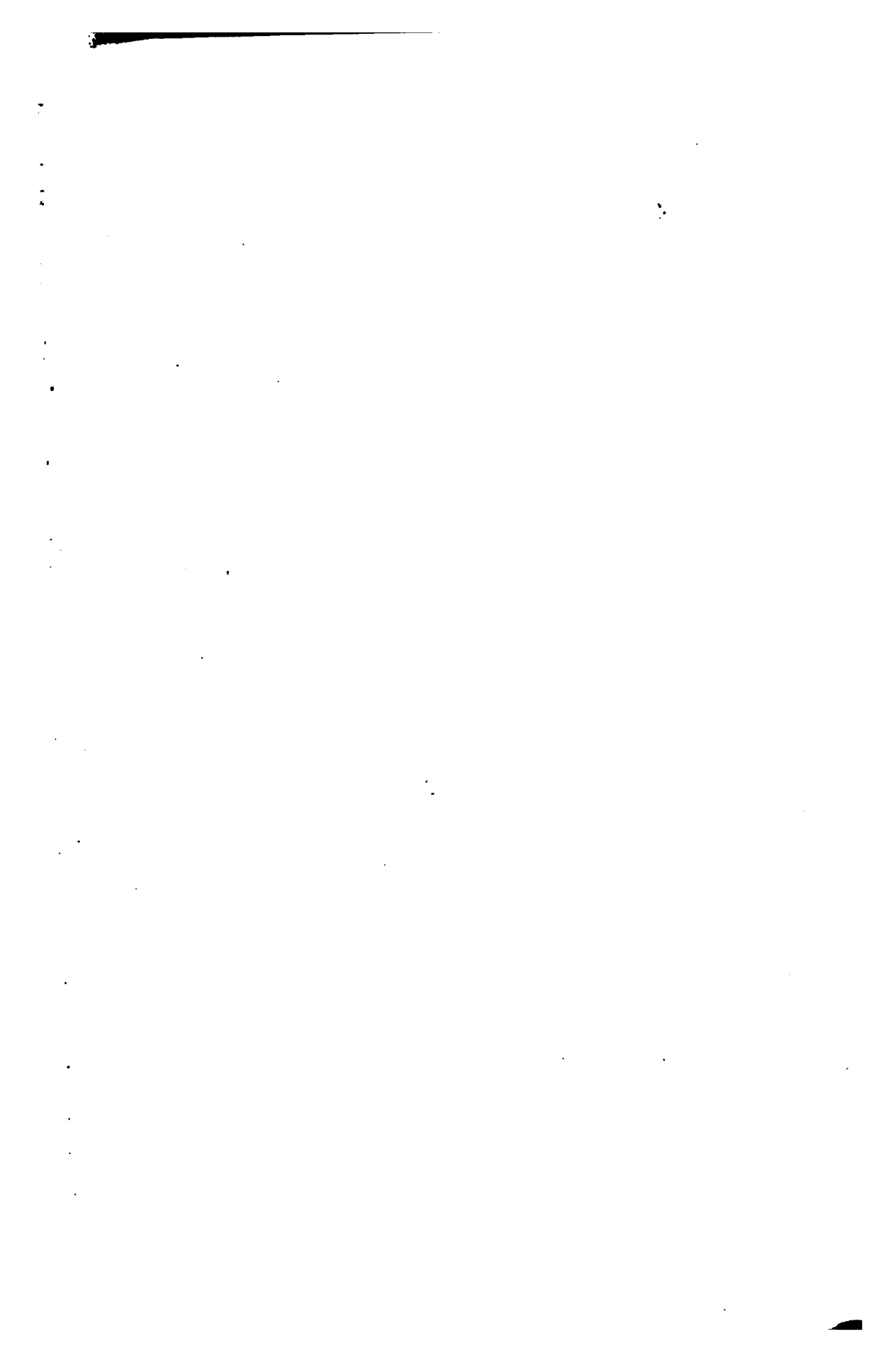
40. OLIVE BADGER.

Hackle. Badger cock.*Body.* Peacock quill dyed in No. II. with flat gold tag.*Whisk.* Pale cream colour.*Hook.* o or oo.

The dressing of the olive spinner.

41. JENNY SPINNER.

Hackle. Badger cock.*Body.* Detached of white horsehair worked on undyed bristle, with four or five turns of crimson tying-silk at both ends.*Whisk.* Pale cream colour.*Hook.* oo or ooo.



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37



Hackle Red Spinner.

38



Brown Badger.

39



Detached Badger.

40



Olive Badger.

41



Jenny Spinner.

42



Hackle Olive Quill.

43



Hackle Blue Quill.

44



Grizzly Blue.

45



Hackle Hare's Ear.

46



Hackle Iron Blue.

47

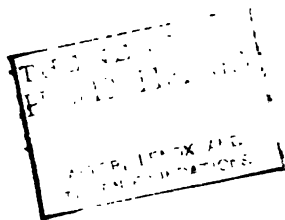


Needle Brown.

48



Little Chap.



Mr. H. S. Hall's original pattern of the "Jenny Spinner" was dressed with this body, and winged with palest silvery dun hackle-points, but I prefer the buzz form with badger hackles for all spinners.

42. HACKLE OLIVE QUILL.

Hackle. Pale silvery dun cock.

Body. Peacock quill dyed in No. VIII.

Whisk. White cock's-beard hackle dyed in No. II.

Hook. o or oo.

This is the olive quill dressed "buzz." The colour of body can be varied by dyeing in Nos. I., II., or III., and using a darker dun hackle according to the shade of the body.

43. HACKLE BLUE QUILL.

Hackle. Pale honey dun cock.

Body. Undyed peacock quill.

Whisk. From honey dun cock's beard-hackle.

Hook. o or oo.

Similar to the Devonshire "Blue Upright."

44. GRIZZLY BLUE.

Hackle. Grizzled blue cock.

Body. Pale mole fur spun on pale yellow silk.

Hook. 1, o or oo.

45. HACKLE HARE'S EAR.

Hackle. Pale blue dun cock.

Body. Dark fur from hare's face ribbed
with fine flat gold.

Whisk. From red cock's beard hackle.

Hook. o or oo.

The hackle tying of the "*Gold-Ribbed Hare's Ear.*"

46. HACKLE IRON BLUE.

Hackle. Dark blue dun cock.

Body. Quill split from feather of old starling
or coot wing.

Whisk. From dark blue dun cock's beard
hackle.

Hook. oo.

47. NEEDLE BROWN.

Hackle. Honey dun cock.

Body. Orange tying-silk.

Tag. Very pale primrose floss silk.

Hook. oo Long.

Mr. Marryat's imitation of the female "Needle Brown," the tag representing the eggs.

48. LITTLE CHAP.

Hackle. Pale blue dun cock.

Body. Copper-coloured peacock herl.

Hook. o or oo.

49. YELLOW BUMBLE.

Hackle. Pale blue dun cock.

Body. Primrose floss silk ribbed with strand of peacock sword-feather.

Hook. o Long or oo Long.

50. ORANGE BUMBLE.

Hackle. Honey dun cock.

Body. Orange floss silk ribbed with a strand of peacock sword-feather, and with fine flat gold.

Hook. o Long or oo Long.

51. CLARET BUMBLE.

Hackle. Medium blue dun cock.

Body. Claret floss silk ribbed with a strand of peacock sword-feather.

Hook. o Long or oo Long.

Nos. 49, 50 and 51 are invaluable patterns for hot weather, and good killers for grayling throughout the autumn—in fact, the “Orange Bumble” has proved so successful on the Test that many prominent anglers in that part of the country usually style it the “*Priceless Bumble*.”

52. FURNACE.

Hackle. Furnace or Coch-y-bonddhu (centre and extreme points black, and remainder of hackle blood red).

Body. Orange floss silk ribbed with a strand of peacock sword-feather, and with fine flat gold.

Hook. o Long or oo Long.

A very favourite hot-weather pattern.

53. CORKSCREW.

Hackle. Brown ginger cock.

Body. The quill of a red-brown partridge tail-feather from which the plume has been entirely cut away with scissors.

Hook. 1, o, or oo.

Before using the quill for the body, flatten it well by drawing it backwards and forwards between the thumb-nail and forefinger. In small streams or coloured water it is considered irresistible by Mr. Marryat, to whose inventive genius this pattern is due.

54. SANCTUARY.

Hackle. Coch-y-bonddhu.

Body. Dark hare's-ear ribbed with fine flat gold.

Hook. 2, 1, or o.

The invention of Dr. Sanctuary, of Salisbury.

55. GREEN INSECT.

Hackle. Pale blue dun.

Body. Two or three strands of peacock sword-feather twisted together.

Hook. o or oo.

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Plate V.

49



Yellow Bumble.

50



Orange Bumble.

51



Claret Bumble.

52



Furnace.

53



Corkscaw.

54



Sanctuary.

55



Green Insect.

56



Red Tag.

57



Orange Tag.

58



Half Stone.

59

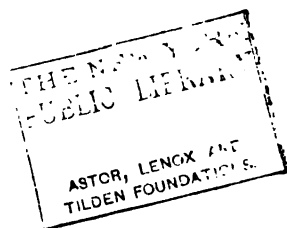


Cochey-Bouldin.

60



Hackle Red Ant.



A very useful grayling fly in the late autumn and winter.

56. RED TAG.

Hackle. Blood-red game cock.

Body. Copper-coloured peacock herl, two or three strands twisted together.

Tag. Ibis or scarlet wool.

Hook. o or oo.

A grand grayling pattern when fished dry, especially in hot weather; for a variety, dress with silvery dun cock hackle. A new and very killing pattern of the Red Tag, dressed with blood-red hackle, Ibis tag, and body of a single strand of the blue and yellow macaw tail-feather has been lately introduced by Mr. Marryat.

57. ORANGE TAG.

Hackle. Blood-red game cock.

Body. Two or three strands of peacock sword-feather twisted together and ribbed with fine flat gold.

Tag. Indian crow or orange wool.

Hook. o or oo.

A variety of No. 56.

58. HALF STONE.

Hackle. Honey dun cock.

Body. Lower half of primrose floss silk, upper half of pale mole fur.

Hook. 1 Long or o Long.

The hackle in this fly is carried down as far as the mole fur dubbing.

59. COCH-Y-BONDDHU.

Hackle. Coch-y-bonddhu.

Body. Of two or three strands copper-coloured peacock herl twisted together.

Hook. 2, 1, 0 or 00.

For a change, rib the body with flat gold,

60. HACKLE RED ANT.

Hackle. Honey dun.

But. Copper-coloured peacock herl.

Body. Orange tying-silk.

Hook. 0 or 00.

61. GRANNOM LARVA.

Wing. A very small piece of the point of a brown partridge hackle.

Hackle. Rusty dun.

Body. Formed by working over the shank of the hook a foundation of pea-green floss silk, and ribbing it with a strand of peacock quill dyed in No. V.

Hook. 1.

For many years the trout at Houghton have fed ravenously on the larva of the grannom, but neglected the fully developed fly, and, after many unsuccessful attempts, this pattern was at last produced by copying the grannom larva taken from the stomach of a fish in 1884.

62. GRANNOM.

Wings. Palest hen partridge wing.

Eggs. Grey ostrich herl dyed in No. V.

Body. Dark heron herl undyed.

Hackle. Rusty dun game-cock, or badger
for a variety.

Hook. 3, 2, or 1.

An even better body for this fly is obtained by selecting a strand of condor pinion-feather, which is nearly white at the point and shading into a dark slate-colour at the root; the longer flue is then stripped off the dark portion of this strand only, and the whole dyed in No. V. The light unstripped part, which shows distinctly the green colour of the dye, is worked at the tail-end to form the eggs, and the darker portion the body of the fly. The wings of the grannom when first hatched are quite pale, but darken considerably from exposure to the air. The trout, however, invariably prefer the newly-hatched flies, so that it is most necessary to dress them with the palest wings possible.

63. ALDER.

Wings. Hen pheasant tail.

Hackle. Rusty black cock.

Body. Copper-coloured peacock-herl.

Hook. 2, 1, or 0.

For a change, wing with bustard. This fly

is too well known and appreciated to need any comment.

64. WELSHMAN'S BUTTON.

Wings. Brown pink feather from under the wings of a peacock.

Hackle. Rusty black cock.

Body. Copper-coloured peacock herl.

Hook. 3, 2, or 1.

This fly is usually on the water during the same period as the May-Fly, but hatches earlier in the day, when the imitation is found most killing, and sometimes the fish take it in preference to the May-Fly, even during the heaviest of the rise.

65. COWDUNG.

Wings. Landrail.

Hackle. Ginger cock.

Body. Dubbing of crewel to tint.

Hook. 2 or 1.

Occasionally very killing, especially on rough and blustery days.

66. RED ANT.

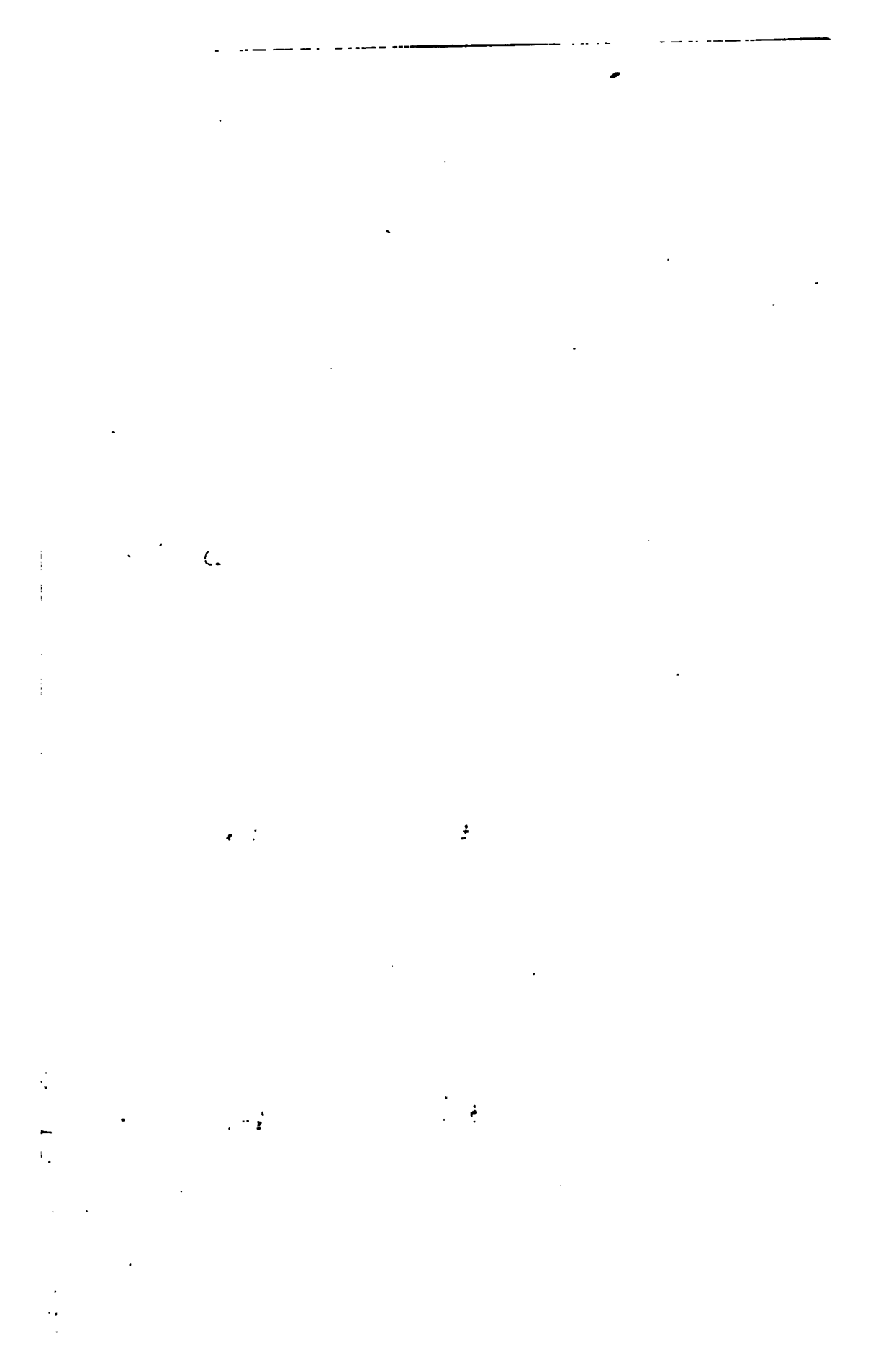
Wings. Pale starling.

Hackle. Red game cock.

But. Copper-coloured peacock herl.

Body. Orange tying-silk.

Hook. 0 or 00.



NEW ARTIFICIAL FLIES.

These are new and appreciated to need any further description.

WILKINSON'S BUTTERFLY.

1. Brown pink feather from under the tail-feathers of a peacock.

2. Rusty black cock.

3. Coarse-coloured peacock herl.

4. 2. 3. 4. 5. 6. 7. 8. 9. 10.

This fly is used on the water during the same season as the May fly, but hatches earlier in the season, when the imitation is found most killing, and sometimes anglers take it in preference to the May fly even during the heaviest of the season.

WILKINSON'S BUTTERFLY.

1. Rusty black cock.

2. Rusty black cock.

3. Coarse-coloured peacock herl.

4. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Occasionally very killing, especially on rough and windy days.

WILKINSON'S BUTTERFLY.

1. Rusty black cock.

2. Rusty black cock.

3. Coarse-coloured peacock herl.

4. Orange tying-silk.

5. Rusty black cock.

Plate VI.

61



Grannom Larva.

62



Grannom.

63



Alder

64



Welshman's Button.

65



Cowdung.

66



Red Ant.

67



Black Ant.

68



Fisherman's Curse.
A

69



Fisherman's Curse.
B

70



Black Gnat A.
(Male)

71

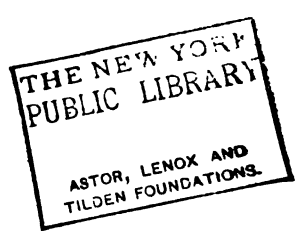


Black Gnat B.
(Female)

72



Black Gnat C.



One of the very best patterns for both trout and grayling during the daytime in the hottest weather, and one which is too often neglected by dry-fly fishermen.

67. BLACK ANT.

Wings. Pale starling.

Hackle. Cock starling.

But. Black ostrich.

Body. Black tying-silk.

Hook. o or oo.

It is, to our mind, very questionable whether this pattern is not taken by the fish for two black gnats in the act of sexual intercourse.

68. FISHERMAN'S CURSE A.

Wings. Palest starling.

Hackle. Cock starling.

Body. Strand of cock golden pheasant tail.

Hook. ooo.

Mr. Marryat's pattern.

Nos. 61 to 68 inclusive are flat-winged flies.

69. FISHERMAN'S CURSE B.

Hackle. Badger, over three turns of black ostrich worked at shoulder.

Body. Black tying-silk with flat silver tag.

Hook. ooo.

Sir Maurice Duff-Gordon's pattern.

70. BLACK GNAT A (MALE).

Wings. Palest starling.

Body. Black quill from chaffinch tail-feather.

Hackle. Cock starling worked in front of wings.

Hook. ∞.

71. BLACK GNAT B (FEMALE).

Wings. Starling tail; select the part of the feather with well-defined light brown tip.

Body. Black quill from chaffinch tail-feather.

Hackle. Cock starling worked in front of wings.

Hook. ∞.

The wings of the female black gnat are longer than those of the male.

72. BLACK GNAT C.

Wings. One strip of prepared pike-scale cut to shape.

Body.

Hackle.

Hook.

} As No. 71.

Mr. H. S. Hall's pattern.

73. SILVER SEDGE.

Wings. Landrail.

Body. White floss silk ribbed with fine silver wire.

Hackle. Pale sandy ginger cock hackle, carried right down the body.

Hook. 0 to 3.

In hot weather, this pattern dressed on a 00 hook, kills very well during the afternoon, especially when the fish are feeding on the "*Fisherman's Curse.*"

74. ORANGE SEDGE.

Wings. Landrail.

Hackle. Ginger cock, carried right down body.

Body. Orange floss silk, ribbed with fine gold wire.

Hook. 0 to 3.

Or, for a variety, this can be dressed with a brown hare's-ear body in place of the floss silk.

75. DARK SEDGE.

Wings. Cock pheasant wing.

Hackle. Rusty coch-y-bonddhu carried right down the body.

Body. Dubbing of white crewel ribbed with gold wire.

Hook. 0 to 3, or even larger occasionally.

Usually known at Houghton as Mr. Ham-brough's Sedge.

76. HAMMOND'S ADOPTED.

Wings. Woodcock wing.

Hackle. Brown ginger cock carried right down the body.

Body. Dubbing of brown crewel to shade, ribbed with gold wire.

Hook. 2 to 4.

The late John Hammond's famous Winchester pattern.

77. ARTFUL DODGER.

Wings. Cock pheasant wing.

Hackle. Blood-red cock carried right down the body.

Body. Dubbing of purple crewel to shade ribbed with gold wire.

Hook. 2 to 4.

For a variety, dress with dark sage-green dubbing body. A good killer during the May-Fly, both for day and evening.

78. COACHMAN.

Wings. White Swan or any other white feather.

Hackle. Red cock.

Body. Copper-coloured peacock herl.

Hook. 1 to 4.

A good night pattern.

79. HARLEQUIN.

Wings. From jay wing.

Hackle. Black cock.

73



Silver Sedge.

74



Orange Sedge.

75



Dark Sedge.

76



Hammond's Adopted

77



Artful Dodger.

78



Coachman.

79



Harlequin.

80

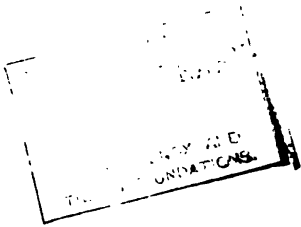


Governor.

81



Large Wobler.



Body. Lower half orange floss silk, upper half blue floss silk, the whole body ribbed with gold wire.

Hook. 0 to 3.

An old-fashioned pattern, which might with advantage be used by the modern school of Anglers, especially for evening fishing.

80. GOVERNOR.

Wings. Woodcock.

Hackle. Ginger cock.

Tag. Primrose floss silk.

Body. Copper-coloured peacock herl.

Hook. 0 to 3.

81. LARGE WICKHAM.

Wings. Jay.

Hackle. Red game cock carried right down body.

Body. Flat gold ribbed with gold wire.

Hook. 2 to 4.

Although usually called a Wickham, of which it is a sort of magnified edition, this is really a form of large Sedge fly, and should only be used at night.

Nos. 70 to 81 inclusive are flat winged flies.

GREEN DRAKES.

The following patterns of Green Drakes and Spent Gnats, or Black Drakes, should all be

dressed on No. 2, 2 long, 3, 3 long, 4, or 4 long hooks.

A. *Wings.* Canadian Summer or Wood Duck.
Head. Bronze peacock herl.

Hackles. The first a hen pheasant dyed in No. II., and the second a good blue Andalusian cock.

Whisk. Four or five strands of Brown Mallard wing-feather.

Body. Detached, of white horsehair over wheaten straw or cigarette maize, worked on a doubled undyed bristle, and the body ribbed with well waxed yellow tying-silk.

B. *Wings.* Canadian Summer or Wood Duck.
Head. Bronze peacock herl.

Shoulder Hackle. Grey hen dyed slightly in No. II.

Ribbing Hackle. Pale ginger cock.

Body. Straw or maize ribbed with crimson tying-silk.

Whisk. Brown Mallard.

Or, for a variety, instead of carrying the ginger hackle down to the tail-end, turn it at shoulder close behind the grey hen hackle, and rib the body with fine flat gold and with the crimson tying-silk.

- C. *Wings.* Canadian Summer or Wood Duck.
Head. Bronze peacock herl.
Shoulder Hackle. Hen pheasant dyed in No. II.
Ribbing Hackle. Blue Andalusian Cock.
Body. Straw or maize ribbed with pale tying-silk.
Whisk. Brown Mallard.
- D. *Wings.* Rouen Drake, dyed in No. IV.
Head. Bronze peacock herl.
Shoulder Hackle. Grey Partridge, dyed in strong tea.
Ribbing Hackle. Pale ginger cock.
Body. Straw or maize ribbed with crimson tying-silk.
Whisk. Brown Mallard.
- E. *Wings.* Rouen Drake dyed in No. IV.
Head. Bronze Peacock herl.
Hackles. The first a grey partridge dyed in strong tea, and the second a pale ginger cock.
Body. Straw or maize ribbed with fine flat gold and crimson tying-silk.
Whisk. Brown Mallard.

In the Green Drake Patterns D and E, the wings are dyed to the colour of the late John Hammond's "*Champion*." Many fishermen prefer the wings of a greener tint, and certainly in the natural fly they

are more decidedly blue green, and less decidedly brown, than the "*Champion*." If a small quantity of dye No. I. be mixed with No. IV., this green shade will be obtained, or No. II. is an intermediate tint between No. I. and No. IV. As far as *killing* is concerned, I have found no pattern with dyed wings so uniformly successful as the "*Champion*," dressed on a 2 hook, although my personal predilection is for the feathers from the undyed Canadian Summer Duck, a bird, which, unfortunately, is rapidly becoming extinct, owing to the great demand for the barred feathers on the part of the Salmon fly-dressers.

F. *Wings.* Rouen Drake undyed.

Head. Bronze peacock herl.

Shoulder Hackle. Hen pheasant dyed in No. II.

Ribbing Hackle. Blue Andalusian cock.

Body. Straw or maize ribbed with pale olive tying-silk.

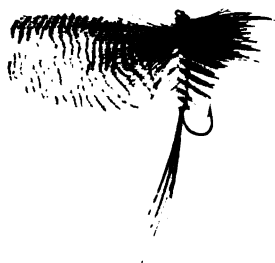
Whisk. Brown mallard.

An endless variety of green drakes can be made with the materials given for the above patterns, some ribbed with tinsel, and both hackles worked close up behind the wings, and others with the cock hackles carried right down body. Wings of Egyptian Goose are also very effective, and, for the shoulder hackles, floricane, bittern, &c., can be used.

Green Drakes



A



B



C



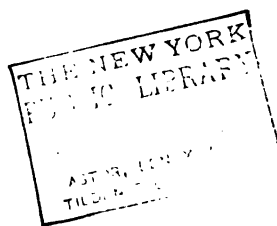
D



E



F



SPENT GNATS OR BLACK DRAKES.

- A. *Wings.* Of four blue Andalusian cock hackles, set on flat, selecting those with well-defined ginger points.

Head. Bronze peacock herl.

Hackles. The first a grey partridge hackle and the second a good badger (Dorking) cock hackle.

Body. Detached, of white horsehair on foundation of an undyed doubled bristle; three or four turns of bronze peacock herl are worked on the bristle at the tail-end, under the horsehair, to form the dark ribs at the tail of the natural fly; the body is ribbed up at intervals with a single turn of pale olive tying-silk.

Whisk. Brown mallard.

- B. *Wings.* Four blue Andalusian hackles as above.

Head. Bronze peacock herl.

Shoulder Hackle. Grey partridge.

Ribbing Hackle. Badger cock.

Body. White floss silk ribbed with an unstripped strand of peacock, which is cinnamon-coloured at root and dark at point, the dark portion being worked at the tail-end.

Whisk. Brown mallard.

- c. *Wings.* Breast or saddle feathers from the pintail.

Head. Bronze peacock herl.

Shoulder Hackle. Grey partridge.

Ribbing Hackle. Badger cock.

Body. Of straw or maize ribbed with pale olive tying-silk, and with a strand of peacock herl, cinnamon-coloured at root.

Whisk. Brown mallard.

Dress all Spent Gnats in the following manner:—

Set on the wings by laying the four hackles horizontally on top of the hook, near the head, two pointing to each side, or the two pintail feathers, one on each side, secured by binding diagonally in both directions with the tying-silk; turn the root-ends of the four hackles, or the two pintail feathers, back toward the tail-end of the fly and bind them down securely with the tying-silk; then work on the head, fasten in and turn the shoulder hackle. In the pattern with detached body proceed from this point as usual with that class of fly; but with other patterns carry the tying-silk to the tail-end of the fly, where secure and set up the whisk, lap the silk back to the shoulder, fasten in the floss silk for the body, the peacock herl for ribbing with the light end at the shoulder and the root-end of the ribbing hackle, carrying the tying-silk back to the tail-end; work down the body, securing it at the tail, and cutting off refuse; rib the body in regularly spaced open folds with the herl, which fasten in at tail, and

1. *Chlorophyll a* and *Chlorophyll b* contents were determined by the method of Arar and Collins (1971).

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1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler (1987). The total chlorophyll content was determined by the method of Arar and Cook (1980). The carotenoid content was determined by the method of Lichtenthaler and Whaley (1980). The total phenolic content was determined by the method of Singleton and Rossi (1965). The total flavonoid content was determined by the method of Zhishen et al. (1999). The total protein content was determined by the method of Lowry et al. (1951). The total lipid content was determined by the method of Bligh and Dyer (1959). The total carbohydrate content was determined by the method of Dubois and Gilles (1950). The total nucleic acid content was determined by the method of Burton (1956). The total mineral content was determined by the method of Ash and Morgan (1974). The total organic acid content was determined by the method of Saito and Tanimoto (1962). The total alkaloid content was determined by the method of Harborne (1973). The total saponin content was determined by the method of Harborne (1973). The total tannin content was determined by the method of Harborne (1973). The total terpenoid content was determined by the method of Harborne (1973). The total steroid content was determined by the method of Harborne (1973). The total glycoside content was determined by the method of Harborne (1973). The total alkaloid content was determined by the method of Harborne (1973). The total saponin content was determined by the method of Harborne (1973). The total tannin content was determined by the method of Harborne (1973). The total terpenoid content was determined by the method of Harborne (1973). The total steroid content was determined by the method of Harborne (1973). The total glycoside content was determined by the method of Harborne (1973).

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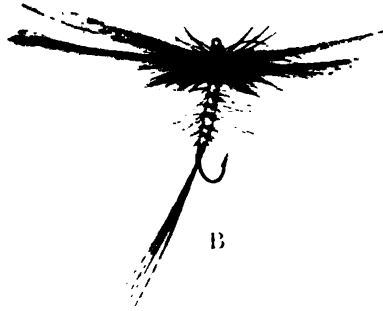
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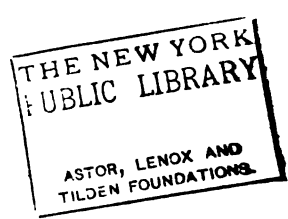
1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971).

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• Heinrich Heine (1797-1856) •

Spent Gnat or Black Drake





cut away any remnant ; turn hackle two or three turns close up to and behind the wings, and then in open folds down to the tail, each fold immediately in front of and against the projecting ribs of the herl ; secure end of hackle with two laps of the tying-silk, finish at tail with whip finish, and touch with varnish.





CHAPTER VI.

HINTS TO DRY-FLY FISHERMEN.

I FANCY I can hear the readers of the preceding chapters exclaim, "True, you have given us a considerable amount of information about the materials required, and the best methods of tying floating flies. True, we have a goodly list of patterns of floating flies, and the feathers, &c., for dressing them; but not one word, as yet, as to how we are to use these infallible devices." This train of reasoning appears so cogent that, although in the original conception of the work there was no intention of referring to this branch of the subject, I will try and give a few practical hints on dry-fly fishing, leaving anything like a full treatise on so important a matter to a future volume, which I hope some day to submit to the Angling world.

For obvious reasons it is as well not to enter on any controversy as to the comparative merits of the two schools of fly-fishing:—the wet or North Country style, and the dry or South Country style. Each is beyond doubt effective in its own particu-

lar streams and under circumstances favouring its use, and a considerable degree of science is attained by the earnest followers of both. We Southern anglers are far too prone to look down on what was wittily described in "The Fishing Gazette," as the "*chuck and chance it*" style, and our North Country friends are too apt to chaff us for our enforced idleness when the fish are not rising. Let each pin his faith to the particular school in which he believes, but at the same time let each admit that there is a certain degree of skill in his opponent's method, and arguments to be advanced in favour of its relative success. One word of advice, however, to our North Country and Scotch friends :—when you find in one of the streams you frequent that your trout from being overfished are becoming more educated, and consequently more shy, do not be too wedded to your old notions to try the advice of a "Southron," and see if a single floating fly, fished upstream will not be effectual in basketing some of your otherwise unattainable fish.

To define dry-fly fishing, I should describe it as presenting to the rising fish the best possible imitation of the insect on which he is feeding in its natural position. To analyse this further, it is necessary, firstly, to find a fish feeding on the winged insect ; secondly, to present to him a good imitation of this insect, both as to size and colour ; thirdly, to present it to him in its natural position,

or floating on the surface of the water with its wings up, or what we technically term, "cocked;" fourthly, to put the fly lightly on the water, so that it floats accurately over him without drag; and, fifthly, to take care that all these conditions have been fulfilled before the fish has seen the Angler or the reflection of his rod.

The first point, viz. :—To find a fish rising at the winged insect, may not, at the first glance, appear difficult, but it is astonishing to how great a degree the success of the Angler depends on his judgment in this particular respect. Merely to note the disturbance caused by the movement of the fish is, of course, a question of sight; but when looking from any distance, it is not quite easy to define exactly the precise spot at which the disturbance took place. Suppose even the fish is rising close to the bank and you mark down carefully the very blade of grass against which the ring of the feeding trout is seen, you must remember that, as a general rule, it is the sound which first attracts your attention, and in the moment which must elapse between hearing the rise and catching sight of the disturbed surface of the stream, the ring or bubble made by the fish has been carried some feet down by the current. When, however, the rise is in mid stream, it is far more difficult: the only mark by which the place can be defined is usually the apparent distance between the ring and some broken line on the surface of the stream,

which broken line is continually changing in contour and in relative position. Then, again, it is necessary to be certain that the movement on the face of the stream is caused by a fish at all : it may be a moorhen, a dabchick, or even a rat, or a mere break in the water caused by some obstruction fixed transversely to the direction of the current. Even if caused by a fish, it may not be what we mean by a rise, or the act of sucking in a winged fly : it may be made by the tail of a trout breaking the surface in his endeavours to force his head further into the weeds, where he is busily engaged in gorging himself with fresh-water shrimps or snails. Sometimes on a careful scrutiny of the position it will be noticed that the apparently rising fish is never for a moment in the same spot, but keeps moving backwards and forwards to the right and to the left, causing continual waves, but scarcely ever actually taking any fly from the surface of the water. In this case the fish is feeding on the undeveloped grub, or larva, rising towards the surface before splitting open its "shuck" or case, and emerging a winged fly ; and if this metamorphosis takes place at the very moment the fish is in the act of seizing the larva, it usually takes the winged fly instead. Practically speaking, a fish feeding either on shrimp, snail, or larvæ, is to be avoided by the dry-fly fisherman, although occasionally, even under these conditions, he may be tempted by a fly floating over him.

The second point, or production of good imitations both as to size and colour of the various flies frequenting the streams, has, I venture to submit, been sufficiently treated of in previous chapters.

The third point, viz. :—that of presenting this good imitation in a natural position, that is, floating on the surface with its wings up or “cocked,” will require some space to consider in detail. As to floating, it will be noticed that the methods of dressing and patterns given in preceding chapters are specially contrived for that purpose, and hence the flies are all much fuller in hackle (and the winged ones in wings also) than those generally in use by North Country fishermen. A word, too, “*en passant*.” Do not imagine that hackle flies are not good floaters! This is a delusion: when dry they float as well or even better than winged ones, and there is besides one very decided advantage in their use, viz. :—that, in whatever position they fall on the water, they are never on their backs or sides, but invariably floating in the natural position. In all flies, whether winged or not, the active agent in keeping them afloat is the hackle, and hence the advice to put plenty of turns of hackle on all patterns for use by the dry-fly fisherman.

When new, the fly, of course, floats naturally, and the first throw with a new fly should accordingly be made with the greatest care, as the most likely one to tempt the fish, and also because at each subsequent cast the probability of his suspicions

being aroused by some slight mistake is ever increasing. After the fly has once been wetted, it must not be returned at once to the water, but thoroughly dried by making a series of false casts backwards and forwards in the air, so as to free the hackle, wings, and body from all moisture. In the act of "drying the fly," as this process of wafting it to and fro is called, as well as in the act of throwing, I need scarcely caution the experienced fly-fisher to give ample time to the line to travel out to its full extent before returning it, neglect of this precaution causing the fly to be "cracked off" and necessitating the loss of fly as well as time, and occasionally temper, in knotting on a fresh one.

As to "cocking," as before remarked, hackle-flies are invariably in their natural position when floating, but, when fishing winged-flies, the overhanded cast in general use among Anglers will be successful, possibly, once out of four casts. The reason of this probably is that when the fly touches the water any excess of force put into the throw, not being expended, causes a further forward motion of the line or gut cast, and this topples the fly over on to its side. The horizontal or "underhanded cast" should be used wherever practicable; the entire secret of it consists in keeping the rod, whether returning or throwing, in a horizontal position or parallel to the surface of the stream.

This cast will "cock" a thoroughly dry fly at least three times out of four, and the reason of this

probably is that the underhanded action propels the fly out in a horizontal line at a slight elevation above the level of the water, and the effect of any excess of force in it is simply to pull the fly back a slight distance in the air by the recoil of the rod, and, in the act of falling, the weight of metal in the bend of the hook, as well as the balancing effect of the wings separated in the shape of the letter V, tends to keep the fly in its natural position with the wings up. There are also two other strong points in favour of the "underhanded cast":—Firstly, that the rod-point being always kept down is never over the water, and the reflection of it, or of the waving motion of the rod, must be less visible to the fish than in the case of the ordinary overhanded throw; secondly, that practically speaking, the Angler who can and does use this cast is independent of the direction of the wind, and can direct the fly actually in the teeth of anything short of an absolute gale. It must, however, be noted that it is far more difficult to place the fly accurately with the underhanded cast, than with the ordinary overhanded one, as when throwing underhanded the rod-point, and consequently the fly, travels horizontally across the point aimed at, and not vertically down on it.

Now, to consider the fourth desideratum, viz. :—To place the fly lightly on the water so that it floats accurately over the fish without the slightest drag; in other words, delicacy and accuracy of

casting and making the fly drift over the fish in a motion and direction similar to that of the natural insect. *Delicacy* should ensure that the fly lands on the water lightly without the smallest splash or disturbance of the placid surface; in fact, as a general rule, when watching your own throw, you ought really to be at a loss to say how the fly did fall on the water. To accomplish this, beginners should bear in mind that, although it is possible to deliver the line too high in the air, this is a far less fatal mistake than to dash it down on the water, and, as a rule, one should study to throw as if the level of the water was at least a foot above its actual plane. *Accuracy* is of the highest importance; the fly should be so placed that it floats down over the very ring of the rising fish at the first attempt. "Ce n'est que le premier pas qui coûte." The first throw over a feeding fish is far more likely to rise him than any subsequent one, and the probability of tempting a fish varies *inversely* as the number of casts made over him.

To make the fly drift over the fish in a motion and direction similar to that of the natural insect is the very keystone of the arch. Wherever possible, keep well out of sight by crouching, kneeling down, or wading *below* the rising fish, and throw the fly up stream so that it lands above the fish at a distance of from one and a half yards to as little as twelve inches, according to the strength of the stream, and place it so that it floats

down accurately over the very spot where the trout or grayling is feeding. As the fly comes down stream, raise the point of the rod slowly, just enough to lift the slack line off the water, but by no means attempt to impart any motion to the fly, or to hurry it down the run; this being a subversion of the usual course taken by the natural fly, which, except in the case of the grannom and alder, floats without the slightest motion of the wings.

Where it is impracticable to throw up stream, cast across and slightly up, and, where this is impossible, cast directly across, and lower the hand slowly as the fly floats down, so as not to drag it. In all cases, and under all conditions, note as a fundamental principle that a fly "dragging," that is, moving more rapidly or more slowly than the stream at the particular point, or floating in a direction different to that taken by the natural insect in a similar position, and so causing a break or "wake" in the water, is comporting itself in an eccentric and unnatural fashion, and will, in all probability and among very shy fish for an absolute certainty not delude them into a belief of its being the living fly.

Occasionally, however, it is impossible, either owing to natural obstructions on the bank or other causes, to fish a spot excepting by casting directly, or nearly directly, down stream; and in such a position a thoroughly dry fly floated down "cocked," is frequently efficacious; but in case it

is not taken, the first throw should be allowed to float without drag well below the fish, and then either be taken off the water in such a direction that the returning motion is invisible to the fish, or, if this be impossible, the line should be drawn in slowly by hand until the fly is well *above* the fish, and then taken quietly off the water; otherwise it will certainly set the trout or grayling down. To accomplish this, a good deal more line must be let out than is required to cover the fish, and, in the act of casting, the hand holding the rod must be perceptibly checked so as to pull the fly back and land it on the water with slack line behind it; the hand is then gradually lowered and the fly allowed to "drift" *without drag* over the rising place of the fish.

The fifth point referred to as a necessary precaution to ensure success, viz.:—That the four previous conditions—finding a fish feeding on winged insects; presenting to him a good imitation of the natural insect both as to size and colour; presenting it to him in its natural position, floating and "cocked;" and putting it lightly on the water so that it floats accurately over him without drag,—shall have been fulfilled before the fish has caught sight of either the Angler or the reflection of his rod, is almost an axiom. With fish so shy and so frequently scared as the denizens of the chalk streams, the slightest suspicion of being fished for, and, "a fortiori", so alarming an incident as the

actual perception of a human being, or of the flashing rod carried by him, are nothing more or less than danger signals, the effect of which is to send the frightened trout or grayling off with a rush either to the nearest sheltering weed, or if, as too often, alas ! happens, every patch of weed has been mowed down, madly up or down the stream, communicating the scare to fish after fish, until the surface of the water for scores of yards is positively ploughed by them "urging on their wild career."

Hence it is necessary at all times to keep well out of sight, not only the Angler himself, by taking advantage of every hiding-place behind tree, bush, or bunch of sedge, and, as far as possible, creeping along on all fours, and kneeling or sitting down when casting, but also by avoiding the flashing about of the highly varnished rod in the bright sunshine. With respect to the motion of the rod, let me again impress upon the tyro the manifest advantage of the "underhanded cast," by means of which neither the point nor the reflection of the rod, is ever over the rising fish.

As to the rod, no dry-fly fisherman can ever hope to be quite first-rate unless he uses a single-handed one. With a double-handed rod he cannot really throw further than with the single ; he cannot fish underhanded, and he is utterly powerless to direct his fly against the wind. This style of fishing is far heavier and more clumsy, and, in fact, the

only advantage of a double-handed rod is the very small one of having a little more control over a hooked fish, and to my mind this is far outbalanced by the increase of weight he has to carry. For length, ten and a half to eleven feet is sufficient; or, one of twelve feet made in three joints for choice, can be wielded by an exceptionally powerful man. It should be moderately stiff, and the action true and quick from the hand to the point. The butt should be well set up, and the handle exactly the size to fit the hand; the middle joint should be springy; when bent with a heavy strain it should show a fair curve, and when released from that strain, should at once spring back to a straight line. The top joint should not be too slight at the point, or it will suffer when returning a long line.

As to material, greenheart may be safely recommended to the majority of Anglers, although personally I prefer six-piece glued-up cane. Do not when buying be misled by any flashy advertisements of cheap(?) but usually rubbishing wares. A really good rod, of well-selected materials, thoroughly seasoned timber, properly fitted, and well finished, will command a fair price. Above all, do not be tempted to purchase a low-priced glued-up cane rod. The American ones are generally too whippy to suit our Hampshire style of fishing. If the cane is of the proper description, if the sections are split (*not sawn*) out of the solid, and correctly

shaped and straightened before working up ; if the glueing-up is properly and carefully carried out with glue which will *resist the action of damp*, and if varnish be used which will stand, they must be sold at a comparatively high price. Beyond all, do not be deluded by any long-winded praise of the mathematical accuracy of the hexagon formed by the glued cane, nor by any puffing of the excellence of the work as evidenced by the fact that the joins where the sections are glued-up are invisible. The former of these is produced by rasping down the outside or bark of the cane after it is glued-up, or, in other words, taking away from your rod the hardest, most elastic, and most reliable portion of the material of which it is made ; and the invisibility of the joins is a trick specially designed to cover inferior workmanship by filling up any little inaccuracies with "Plaster-of-Paris" or some cunning "cement" before varnishing.

As to the reel-line, solid plaited silk dressed is the best material, although there is plenty of room for improvement in the quality of the silk used, in the mode of plaiting, and in the composition of the dressing. It should be quite stout in the middle, and parallel in thickness throughout, excepting for about five yards at each end, which should gradually taper from the stout to as fine a point as is compatible with the strength required. A line before being used should be kept in a dry place for at least six months, and should be well

rubbed over with red deer fat from end to end, to render it perfectly waterproof. The deer fat makes the line float on the surface of the water, and the Angler is enabled by its use to return and consequently throw at least four yards more line than without it.

The "collar" or gut cast should be from one and a half to three and a half yards in length, and it must be remembered that, in casting against the wind, the stronger it blows the shorter the length of the gut should be. In throwing down wind, the exact converse should be followed, for the stronger the force of the wind, the longer should be the gut cast. In all cases the upper end should be as stout as the point of the reel-line, and the last three strands next to the fly should be as fine as you dare to use, the intermediate portion forming an even taper. Pay a fair price for the gut, and, if you have the time, knot up the casts yourself, first soaking the gut thoroughly in lukewarm water, and using either of the knots described by my old and valued friend Francis Francis in his "Book on Angling," and engraved on the plate facing page 97 in the sixth edition of that excellent work.

One more word of advice. Having succeeded in rising your fish, strike him ! By this I do not mean that you should drive with all your might, and make a regular smash, but that you should strike *from the reel* (that is, keeping your hand off the line so that it can run freely) with a quick turn of the wrist, just

raising your hand sufficiently to drive the hook home. When your fish is hooked, at once place your rod in the vertical position, and put on as much strain as your tackle will bear; if lightly hooked it is any odds you lose the fish sooner or later, and there can be no doubt that the majority of well-hooked fish that get away owe their escape to the want of firmness and decision on the part of the Angler at the first stage of playing. Work him down stream all the time you are playing him, to take him as far as possible from his home; give your fish the *butt* as soon as he shows the first signs of giving in, and lead him to the landing net. Lift him out, and, if large enough to kill, give him a smart tap on the head just at the top of the spinal column, to put him out of pain at once; and if he should be under the limit of size for the water you are fishing, carefully and quickly return him to his native element, dropping him gently in the water, and not dashing him down—a piece of carelessness which frequently stuns and kills both trout and grayling—but giving him a chance of growing to maturity, and yourself or some other honest Angler a hope of sport in the future.





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